

CERTIFICATE OF APPROVAL No 5/6A/48

VARIATION No 5

This is to certify that the following modifications of the patterns of the

Wayne Driveway Flowmeters Model AS 70 and Others

approved in Certificate of Approval No 5/6A/48 dated 10 June 1974 and subsequent variations

submitted by Wayne Pumps Australia Pty Ltd,
29 Anzac Highway,
Keswick, South Australia, 5035,

have been approved under the Weights and Measures (Patterns of Instruments) Regulations as being suitable for use for trade.

Date of Approval: 26 January 1978

The approved modifications, described in Technical Schedule No 5/6A/48 - Variation No 5 and in drawings and specifications lodged with the Commission, provide for:

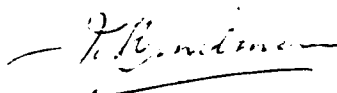
1. a notice advising the users of the price-computing limitations of the 3-wheel counter-section Veeder-Root computers; and
2. a 4-wheel counter-section Veeder-Root computer.

The approval of the driveway flowmeters -

1. with 3-wheel counter-section computers will expire on 1 January 1980; and
2. with 4-wheel counter-section computers will expire on 1 January 1983.

All instruments conforming to this approval shall be marked with the approval number "NSC No 5/6A/48".

Signed



Acting Executive Officer

CANCELLED

0/100



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6A/48

Patterns:

- Wayne Single Driveway Flowmeter Model AS70 (see Figures 2 to 4)
- Wayne Single Driveway Flowmeter Model ASS70 (see Figures 5 to 7)
- Wayne Dual Driveway Flowmeter AD70 (see Figures 8 and 9)
- Wayne Single Driveway Flowmeter 605 (see Figures 10 to 12)
- Wayne Dual Driveway Flowmeter 605 (see Figures 13 to 15)
- Wayne Single Driveway Flowmeter 605/10 (see Figures 16 and 17)
- Wayne Single Driveway Flowmeter AS10R (see Figures 18 and 19)
- Wayne Single Driveway Flowmeter 600 MRC (see Figures 20 to 22)

Submitter: Wayne Pumps Australia Pty Ltd,
Anzac Highway,
Keswick, South Australia, 5035.

Date of Approval: 10 June 1974

Conditions of Approval:

1. This approval is subject to review on or after 31 December 1975 to determine the extent to which the patterns and variants may need to be modified to comply with the Commission's pattern approval requirements at the date of review.
2. All instruments conforming to this approval shall be marked with the approval number "NSC No 5/6A/48".

Description:

1. The sets of components tabulated in Columns 4 to 11 of Figure 1, assembled in housings, make up variants which are known by the same names and are of the same general appearance as the patterns.
2. The flexible spout on any nozzle may be replaced by a rigid spout (see Figure 23), provided the spout is retained in the nozzle holster by an amount of at least 10 mm when the nozzle is in the normal hang-up position.

Description of Components:

1. Pump — positive displacement rotary pump.
2. Pump — positive displacement rotary pump with integral gas separator and non-return valve — Wayne P4682 (see Figures 24 and 25).
3. Gas separator — Wayne P5184 (see Figures 26 and 27).
4. Non-return valve — Wayne P3451 (see Figure 28).
5. Non-return valve — Wayne P5687 (see Figure 29).
6. Meter — Wayne P4685 (see Figure 30), sealed by a lead plug on a bracket covering the meter adjustment.
7. Meter — Wayne P3899 (see Figure 31), sealed by a lead plug in a bracket on the meter and cover.
8. Meter — Wayne P8765, sealed by a one-hole cap and wire seal (see Figures 32 and 33).
9. Computer — Veeder-Root M36 with a maximum unit-price setting of 59,9 cents/litre (see Figure 34), or 39,9 cents/litre modified to 46,6 cents/litre (see Figure 35).
10. Computer — Veeder-Root M56 with a maximum unit-price setting of 59,9 cents/litre (see Figure 36).
11. Computer — Veeder-Root 1611 with a maximum unit-price setting of 99,9 cents/litre (see Figure 37).
12. Computer — Veeder-Root 1613 with a maximum unit-price setting of 99,9 cents/litre (see Figure 38). The computer may have each price and quantity wheel numbered 0 to 9 and the right-hand wheels graduated and numbered 0 to 9.
13. Computer — Veeder-Root VR 101 with a maximum unit-price setting of 99,9 cents/litre (see Figure 39). The pinions on the variator are topped with pinned metal shields which prevent the segmented gears being disengaged from the pinions (see Figures 40 and 41). Metal guards attached to studs on the counter section prevent the

- price-posting wheels from being disengaged from the segmented price-posting gears (see Figure 42).
14. Computer — Veeder-Root LQ 1615, a non-price-computing indicator of quantity only (see Figure 43). The indicator has each quantity wheel numbered 0 to 9 and the right-hand wheel graduated and numbered 0 to 9.
 15. Sight glass — Wayne P3557 (see Figure 44).
 16. Sight glass — Wayne P3959 (see Figure 45).
 17. Sight glass — Wayne P4664 (see Figure 46).
 18. Hose — $\frac{3}{4}$ -inch bore.
 19. Nozzle — Wayne P4364 with flexible spout (see Figure 47) or with the rigid spout illustrated in Figure 23.
 20. Nozzle — Wayne P3484 with a flexible spout (see Figure 48) or with the rigid spout illustrated in Figure 23.
 21. Nozzle — Wayne P6561 (see Figures 49 and 50).
 22. Nozzle — Wayne P6959 (see Figure 51). This nozzle may have a flexible rubber spout.
 23. Nozzle — Wayne P7775 (see Figures 52 and 53).
 24. Nozzle — OPW 1A (see Figures 54 and 55).
 25. Nozzle — STM 363 (see Figures 56 and 57).
 26. Dial face — on each side of the housing behind a glazed window.
 27. Dial face — on one side of the housing behind a glazed window.
 28. Pump interlock — retractable nozzle hang-up and starting lever:
 - (a) The hang-up lever cannot be lifted to start the pump until the computer is reset to zero.
 - (b) When the hang-up lever is returned to the off position allowing

the nozzle to be returned to its hang-up, interlocks are engaged which prevent the pump from being restarted until the computer is reset to zero.

29. Pump interlock — retractable nozzle hang-up hook:
- (a) The starting handle cannot be turned to start the pump and retract the hang-up hook, until the computer is reset to zero.
 - (b) When the starting handle is turned to the off position allowing the hang-up hook to return from its retracted position, interlocks are engaged which prevent the pump from being restarted until the computer is reset to zero.
30. Pump interlock — starting handle (fixed hook):
- (a) The starting handle when turned to start the pump engages the reset cam before the motor is switched on.
 - (b) When the starting handle is turned to the off position allowing the nozzle to be returned to its hang-up, interlocks which prevent the motor from being restarted are engaged before the starting handle reaches a position which allows the nozzle to be returned to its hang-up.



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6A/48

VARIATION No 1

Pattern: Wayne Single Driveway Flowmeter 605

Submitter: Wayne Pumps Australia Pty Ltd,
Anzac Highway,
Keswick, South Australia, 5035.

Date of Approval of Variation: 13 February 1975

The modification described in this Schedule applies to patterns described in the following pages and figures of Technical Schedule No 5/6A/48 dated 20 June 1974:

Pages 1 to 4 dated 20 June 1974

Figures 5/6A/48 - 1 to 43 dated 20 June 1974

All instruments conforming to this approval shall be marked "NSC No 5/6A/48".

Description:

The approved modification provides for peripheral equipment to be driven by a flexible cable from the computer quantity drive shaft.

Special Tests:

The effect of the peripheral equipment on the calibration of the driveway flowmeter can be checked by comparing the variations of test deliveries with and without the peripheral equipment connected.



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6A/48

VARIATION No 2

Pattern: Wayne Driveway Flowmeters

Submittor: Wayne Pumps Australia Pty Ltd,
Anzac Highway,
Keswick, South Australia, 5035.

Date of Approval of Variation: 26 September 1975

The modifications described in this Schedule apply to the patterns described in Technical Schedule No 5/6A/48 dated 27 August 1974, and Technical Schedule No 5/6A/48 - Variation No 1 dated 27 February 1975.

All instruments conforming to this approval shall be marked "NSC No 5/6A/48".

Description:

The approved modifications provide for a Wayne 605 (Blending) Driveway Flowmeter (see Figure 58) with:

1. A Veeder-Root 1648 computer* (see Figures 59, 60 and 61), indicating in 0,1-litre increments, giving a maximum indication of 999,9 litres, \$99,99 total price and 99,9 cents unit price. The right-hand quantity wheel is graduated and numbered 0 to 9; the other wheels are numbered 0 to 9.
2. A Veeder-Root 1649 computer which is similar to the Veeder-Root 1648 computer except for differences in the variators (see Figure 62).
3. A Veeder-Root 7025 computer which is similar to the Veeder-Root 1648 computer, except for differences in the variators, and a metal guard attached to studs in the

* Note: The maximum speed recommended by the manufacturer for the right-hand wheel of any computer should not be exceeded.

counter section preventing the price-posting wheels from being disengaged from the segmented price-posting gear (see Figures 39 and 42). The VR 101 variators are as illustrated in Figures 39, 40 and 41 except that the price spur gear in the variator and the input gear of the counter section are of ratio 32 : 12 (see Figure 63).

4. A Wayne P9520 meter may be used in the Wayne 605 (blending) driveway flowmeter assembly.



NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 5/6A/48

CHANGE No 1

20 February 1976

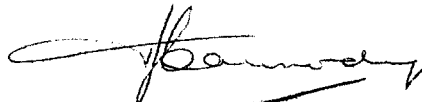
The approval of the

Wayne Driveway Flowmeters

given in Certificate No 5/6A/48 - Variation No 2 dated
27 October 1975,

is varied to amend the description in Technical Schedule
No 5/6A/48 - Variation No 2 to read "A Veeder-Root 7525
computer" instead of "A Veeder-Root 7025 computer".

Signed



Executive Officer

20/2/76



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6A/48

VARIATION No 3

Pattern: Wayne Driveway Flowmeters

Submittor: Wayne Pumps Aust. Pty Ltd,
Anzac Highway,
Keswick, South Australia, 5035.

Date of Approval of Variation: 20 May 1976

The modification described in this Schedule applies to the patterns described in Technical Schedule No 5/6A/48 dated 27 August 1974 and Technical Schedule No 5/6A/48 - Variation Nos 1 and 2 dated 27 February 1975 and 27 October 1975.

All instruments conforming to this approval shall be marked "NSC No 5/6A/48".

The approval of the blending driveway flowmeter expires on 1 March 1977.

Description:

The approved modification provides for the right-hand quantity-indicating wheel of the Veeder-Root 1648 and 1649 computers in blending driveway flowmeters to be ungraduated after conversion to the metric system of measurement. The ungraduated right-hand quantity-indicating wheel is illustrated in Figure 59.



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6A/48

VARIATION No 4

Pattern: Wayne Driveway Flowmeters Model AS 70 and Others
approved in Certificate No 5/6A/48 dated 10 June 1974
and subsequent variations

Submittor: Wayne Pumps Aust. Pty Ltd,
29 Anzac Highway,
Keswick, South Australia, 5035.

Date of Approval of Variation: 26 November 1976

The modification described in this Schedule applies to the patterns described in Technical Schedule No 5/6A/48 dated 20 June 1974 and Technical Schedule No 5/6A/48 - Variation Nos 1, 2 and 3 dated 27 February 1975, 27 October 1975, and 7 June 1976 respectively.

All instruments conforming to this approval shall be marked "NSC No 5/6A/48".

Description:

The approved modification provides for a rigid universal drive shaft to be fitted to the computer to transmit quantity data to peripheral devices which are not a part of the measuring instrument.* These devices, which may only be provided with the authorisation of the Weights and Measures Authority of the State, may, for example, print receipts or store and process the data, etc.

Special Tests:

The effect of peripheral devices on the calibration of the driveway flowmeter can be checked by comparing the variation in test deliveries with and without the peripheral devices connected. The drive shaft has a telescopic section at one end and can be readily removed by pushing the telescopic end in and lifting the other end from its socket.

* The measuring instrument examined and approved by the Commission is limited to those devices which determine the value of a physical quantity, control the measurement, and indicate the result of the measurement on a non-permanent visual display, for example, a seven-segment indicator or Veeder-Root computer.



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6A/48

VARIATION No 5

Pattern: Wayne Driveway Flowmeter Models AS 70 and Others

Submitter: Wayne Pumps Australia Pty Ltd,
29 Anzac Highway,
Keswick, South Australia, 5035.

Date of Approval of Variation: 26 January 1978

The modifications described in this Schedule apply to the patterns described in Technical Schedule No 5/6A/48 dated 20 June 1974, and Technical Schedule No 5/6A/48 - Variation Nos 1 to 4 dated 27 February 1975, 27 October 1975, 7 June 1976 and 10 March 1977 respectively.

All instruments conforming to this approval shall be marked "NSC No 5/6A/48".

The approval of the driveway flowmeters -

1. with 3-wheel counter-section computers will expire on 1 January 1980; and
2. with 4-wheel counter-section computers will expire on 1 January 1983.

Description:

The approved modifications provide for:

1. a notice adjacent to the quantity and price indicators on each reading face of the instrument advising the user of the price limitations of the 3-wheel counter-section computers; and
2. a 4-wheel counter-section on the Veeder-Root computer (see Figures 64, 65 and 66).

FIGURE 5/6A/48 - 1

1	2	3	4	5	6	7	8	9	10	11
	COMPONENTS	FOOTNOTES	VARIANTS							
			AS 70	ASS 70	AD 70	605 Single	605 Dual	605/10	AS10R	600 MRC
1	Pump		*	*	*		*	*	*	*
2	Pump, gas separator, non-return valve, Wayne P4682					*				
3	Gas separator, Wayne P5184		*	*	*		*	*	*	*
4	Non-return valve, Wayne P3451		*	*	*				*	*
5	Non-return valve, Wayne P5687						*	*		
6	Meter, Wayne P4685					C	C	C		
7	Meter, Wayne P3899		*	*	*				*	*
8	Meter, Wayne P8765					C	C	C		
9	Computer, VR M36 (\$c)		A	A	A	A	A		A	A
10	Computer, VR M56 (\$c)		A	A	A	A	A		A	A
11	Computer, VR 1611		A	A	A	A	A		A	A
12	Computer, VR 1613		A	A	A	A	A		A	A
13	Computer, VR 101		A	A	A	A	A		A	A
14	Computer, VR LQ 1615							*		
15	Sight glass, Wayne P3557		*		*				*	*
16	Sight glass, Wayne P3959			*						
17	Sight glass, Wayne P4664					*	*	*		
18	Hose $\frac{3}{4}$ -inch bore		*	*	*	*	*	*	*	*
19	Nozzle, Wayne P4364	1	B	B	B	B	B	B	B	B
20	Nozzle, Wayne P3484	1	B	B	B	B	B	B	B	B
21	Nozzle, Wayne P6561		B	B	B	B	B	B	B	B
22	Nozzle, Wayne P6959	1	B	B	B	B	B	B	B	B
23	Nozzle, Wayne P7775		B	B	B	B	B	B	B	B
24	Nozzle, OPW 1A		B	B	B	B	B	B	B	B
25	Nozzle, STM 363		B	B	B	B	B	B	B	B
26	Dial face, front and rear		*	*	*	*	*	*	*	E
27	Dial face, front									E
28	Pump interlock, retractable starting lever		*	*	*				*	*
29	Pump interlock, retractable hook					D	D	D		
30	Pump interlock, starting handle					D	D	D		

- * - indicates required component
- A - indicates alternative components, one of which is required
- B to E - as for A

FOOTNOTE

- 1 - flexible spout nozzles are not approved for use when the pump interlock is by means of the starting handle

Compatibility Table for Components Described
in this Technical Schedule

20/6/74

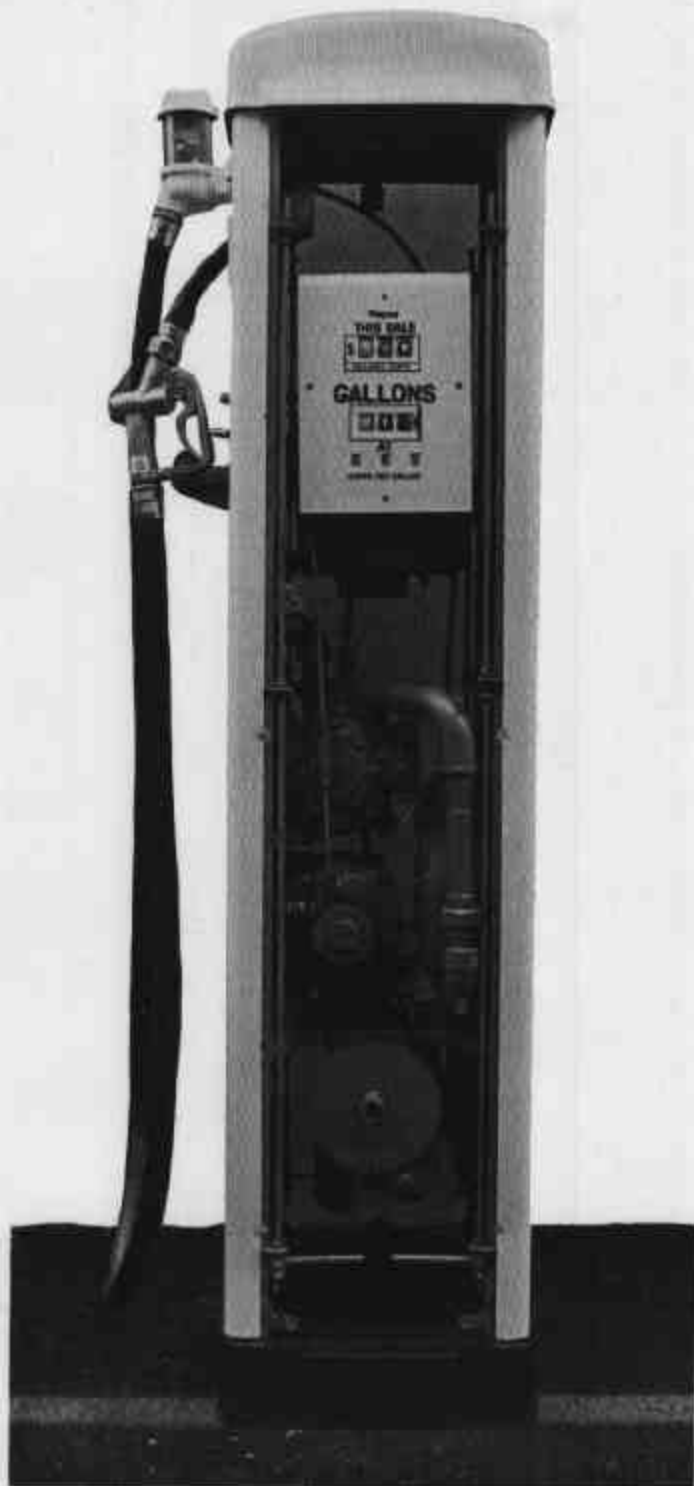
FIGURE 5/6A/48 - 2



Wayne AS 70

20/6/74

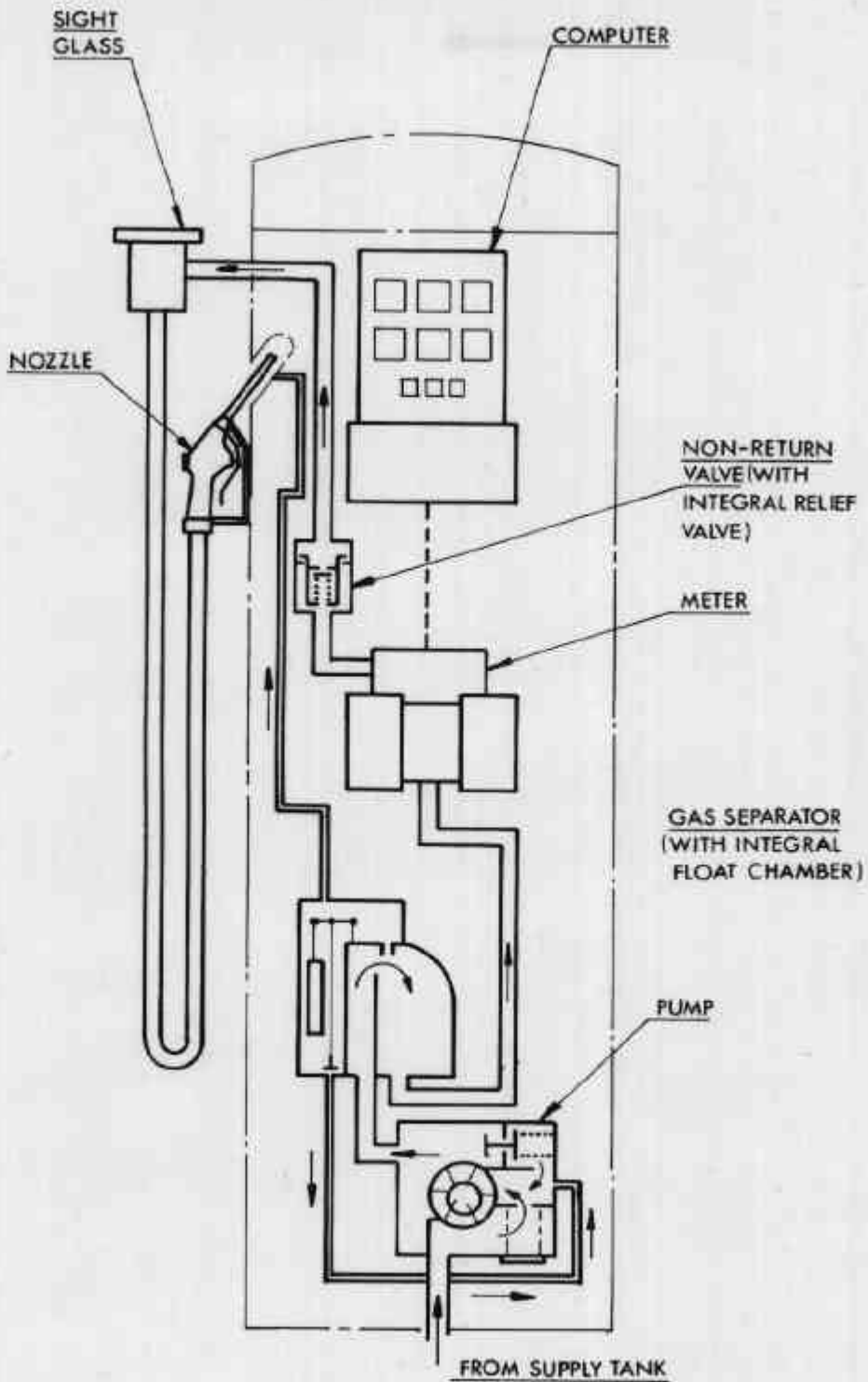
FIGURE 5/6A/48 - 3



Wayne AS 70 with panels removed

20/6/74

FIGURE 5/6A/48 - 4



Wayne AS 70 — Hydraulic Diagram

20/6/74

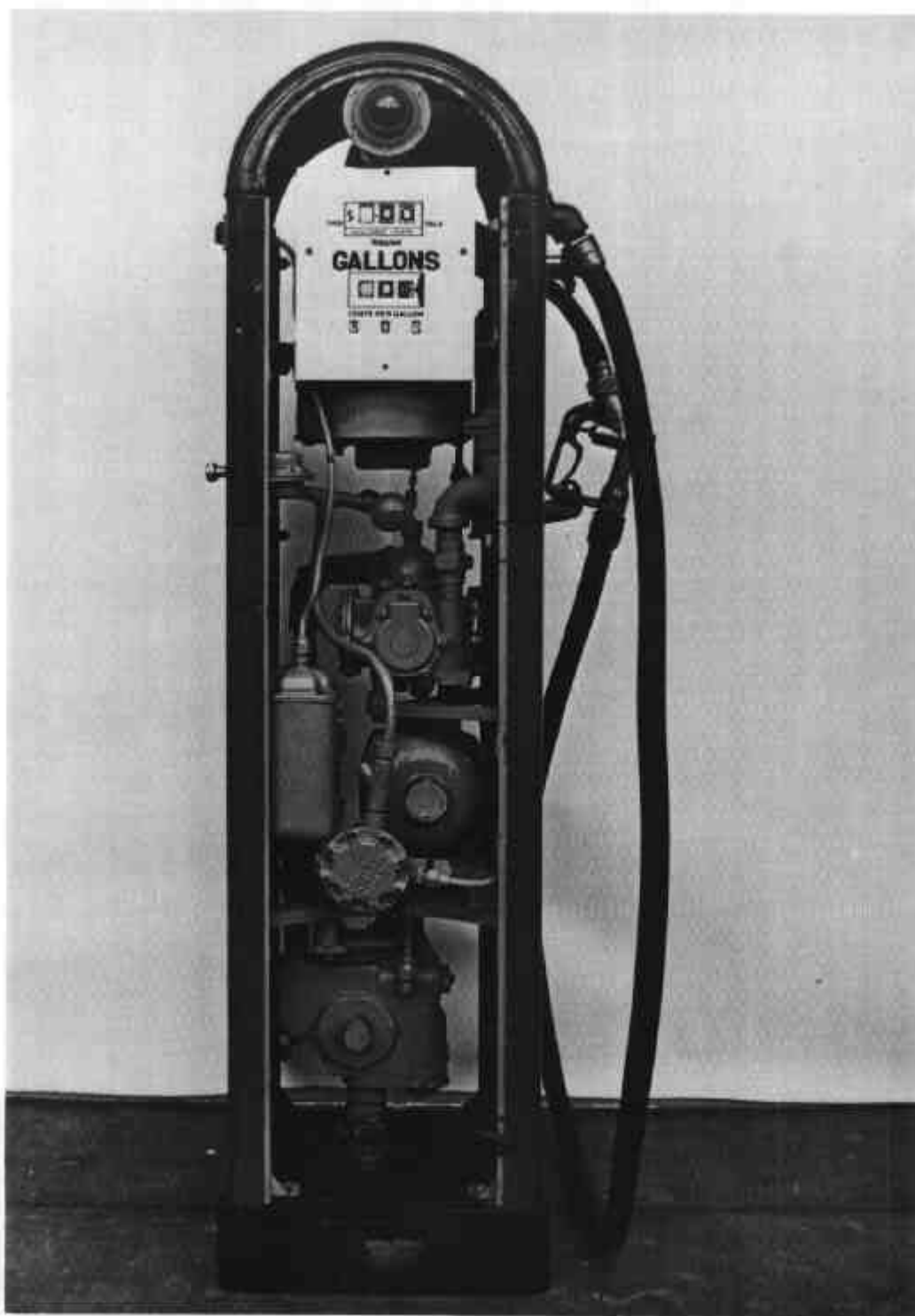
FIGURE 5/6A/48 - 5



Wayne ASS 70

20/6/74

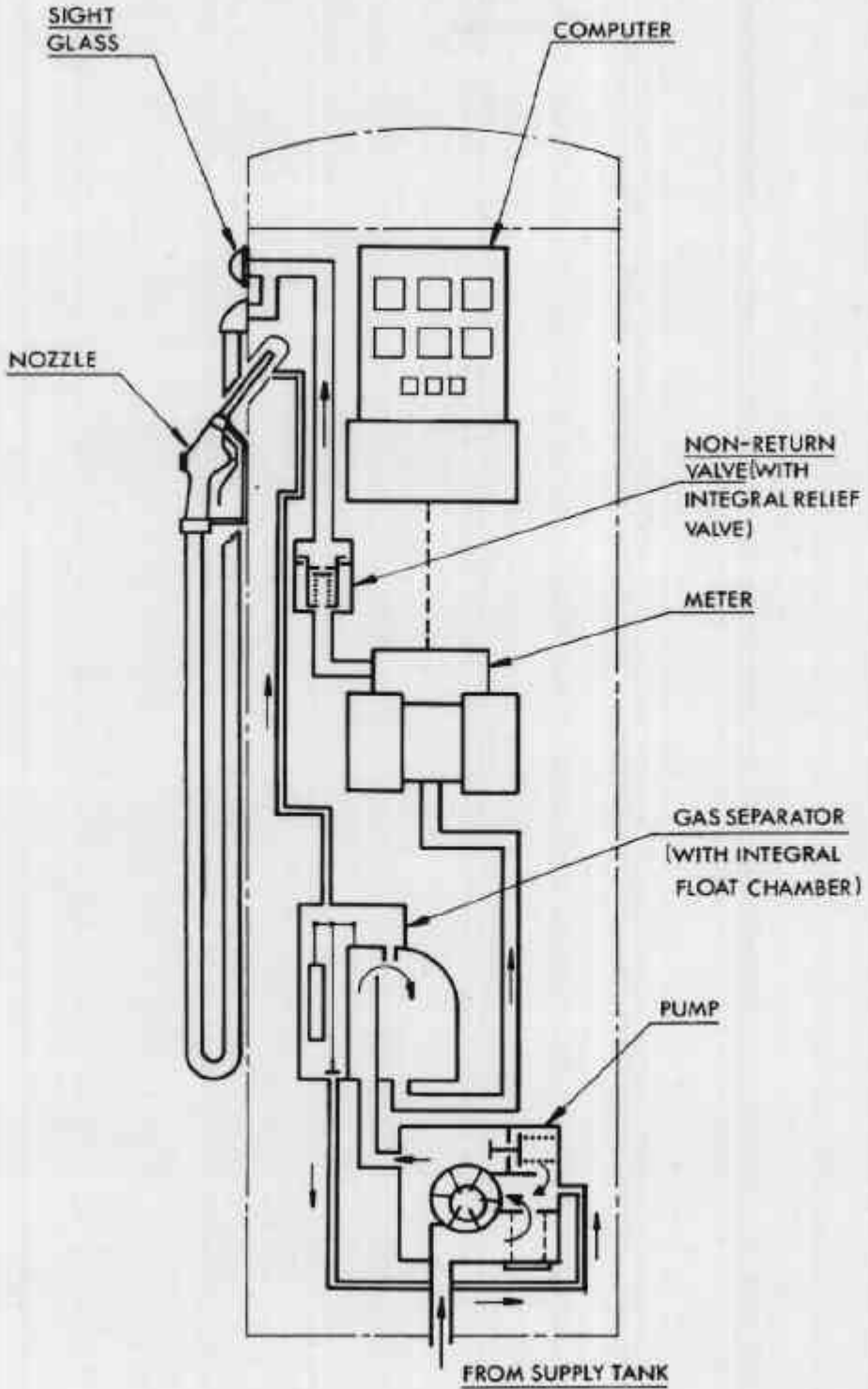
FIGURE 5/6A/48 - 6



Wayne ASS 70 with panels removed

20/6/74

FIGURE 5/6A/48 - 7



Wayne ASS 70 — Hydraulic Diagram

20/6/74

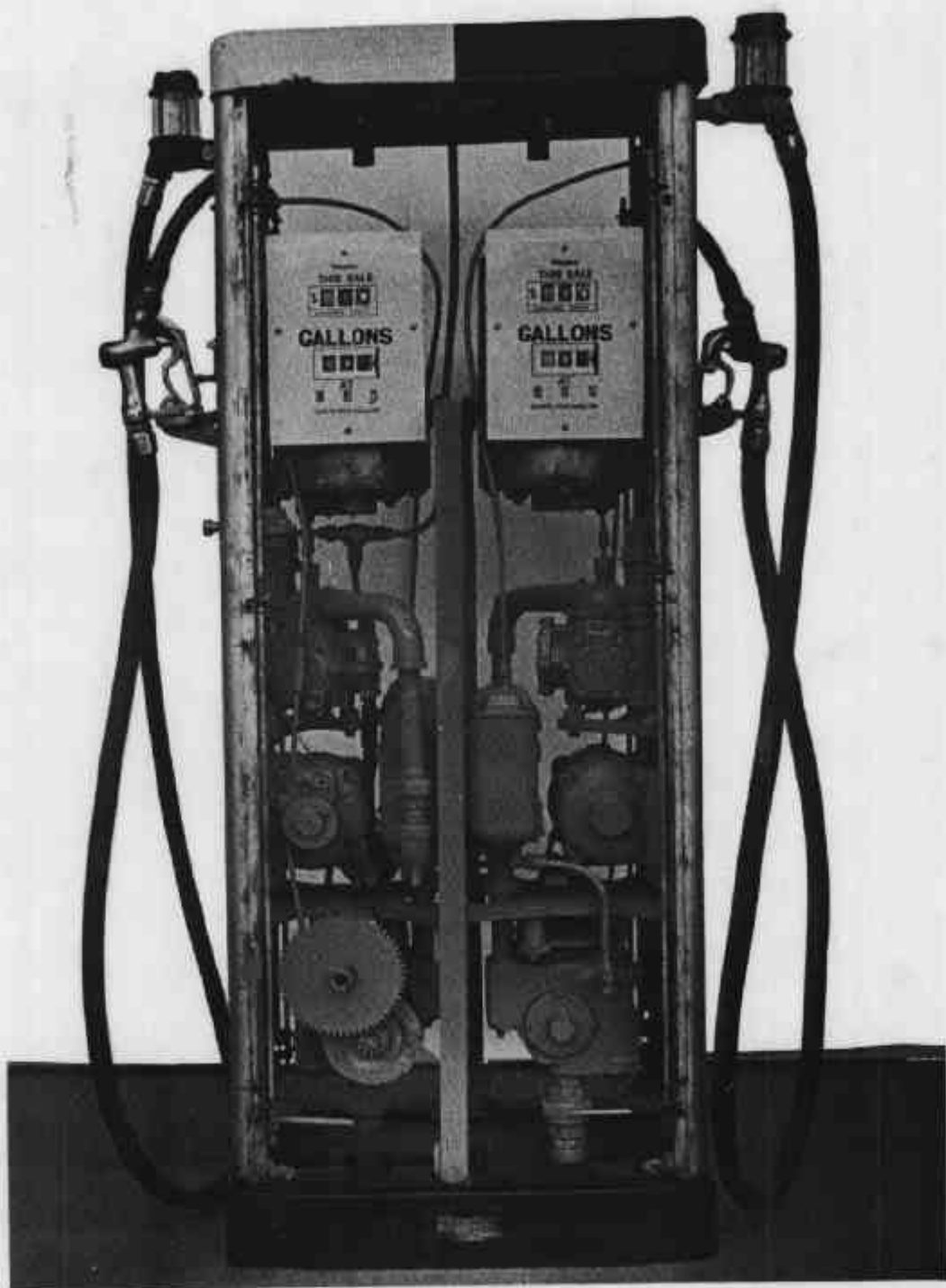
FIGURE 5/6A/48 - 8



Wayne AD 70

20/6/74

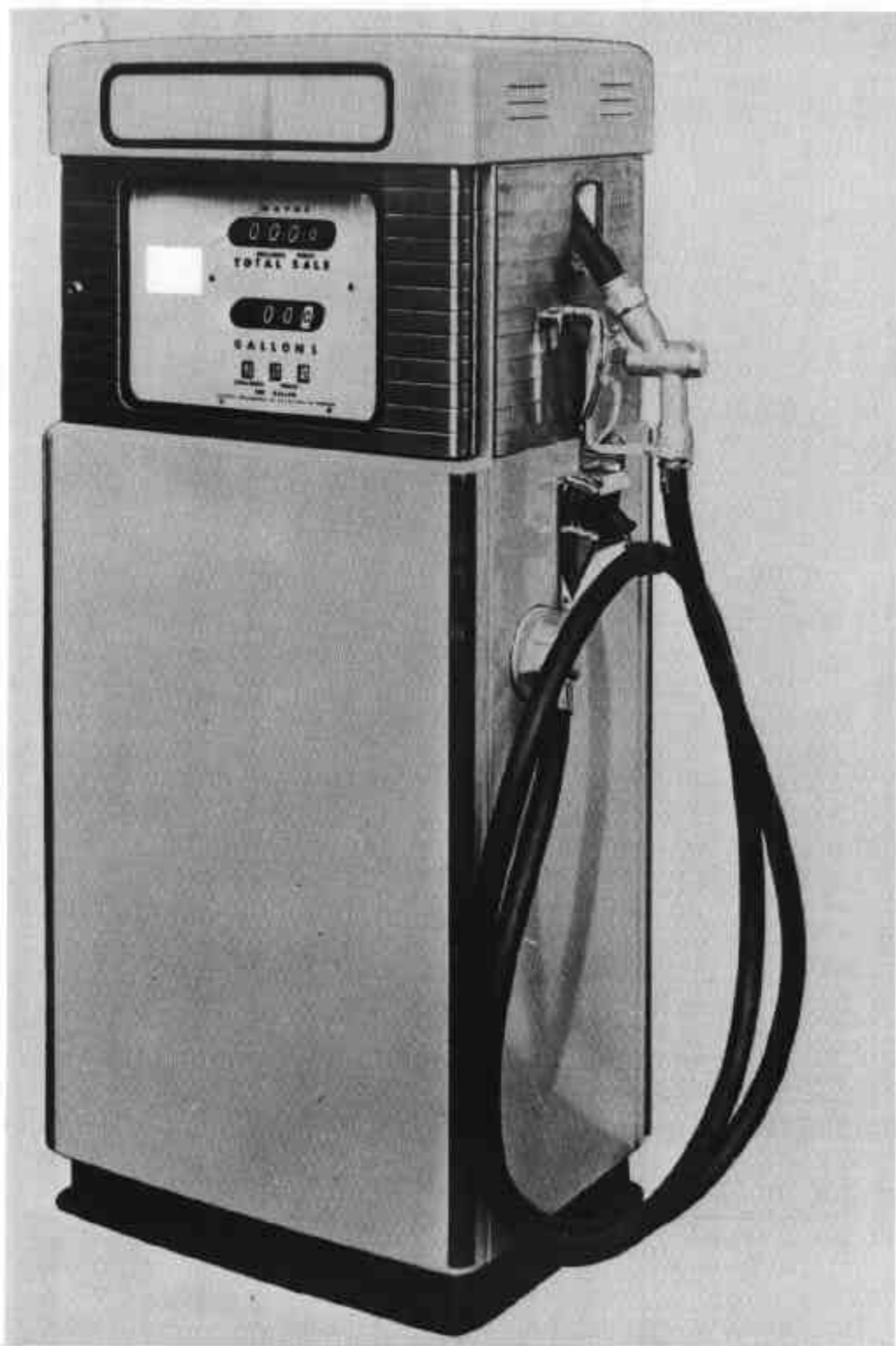
FIGURE 5/6A/48 - 9



Wayne AD 70 with panels removed

20/6/74

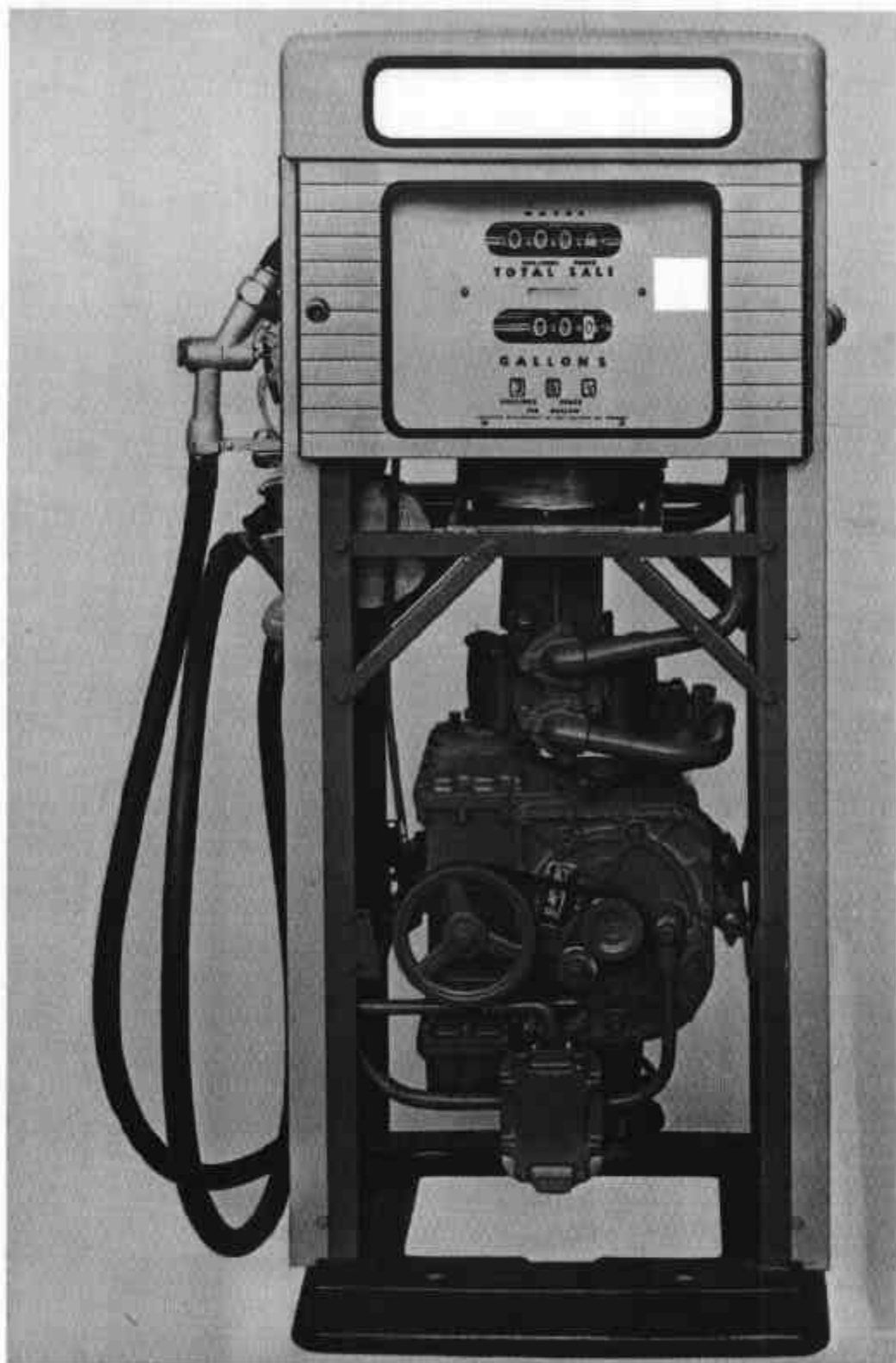
FIGURE 5/6A/48 - 10



Wayne 605 Single

20/6/74

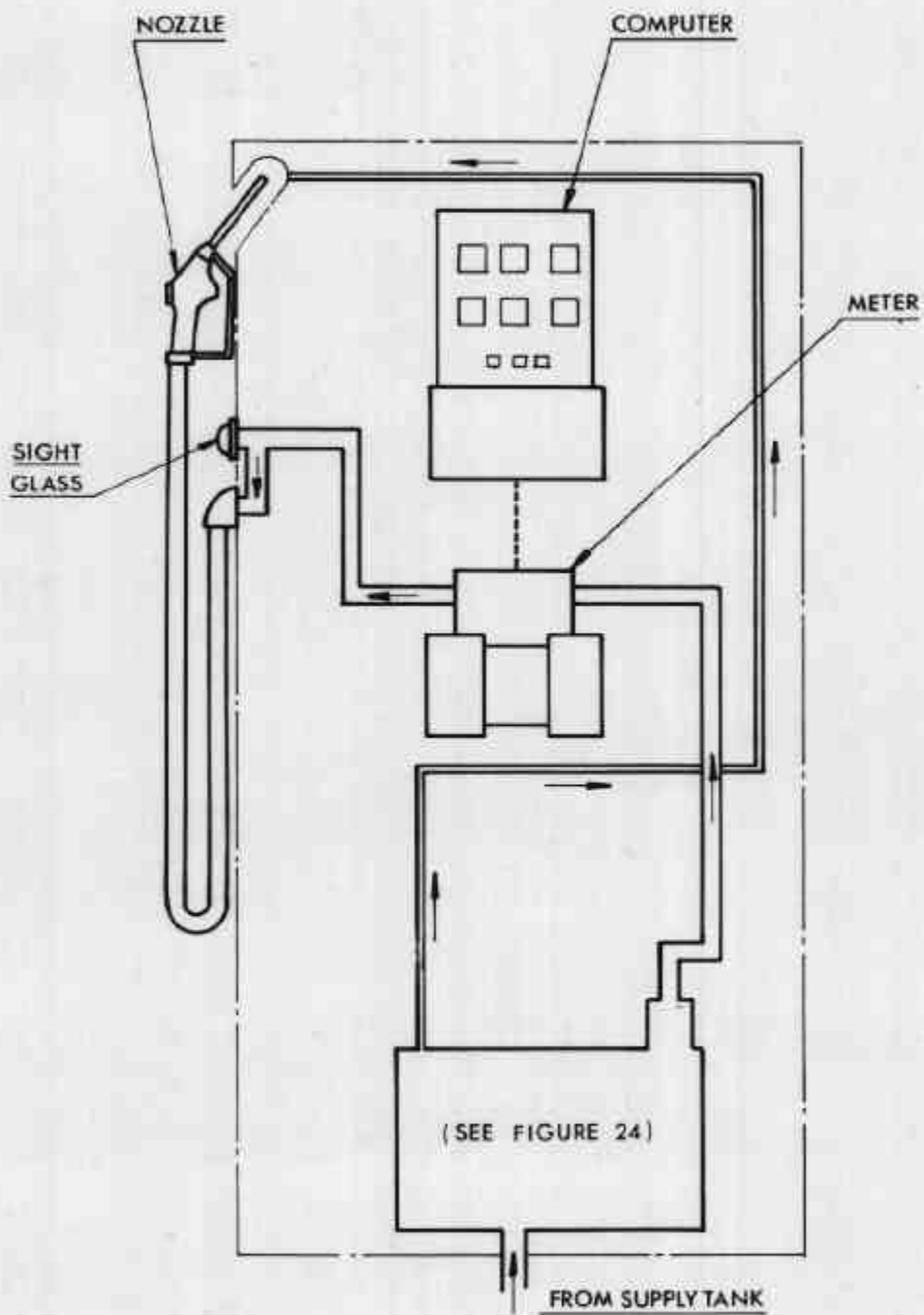
FIGURE 5/6A/48 - 11



Wayne 605 Single with panels removed

20/6/74

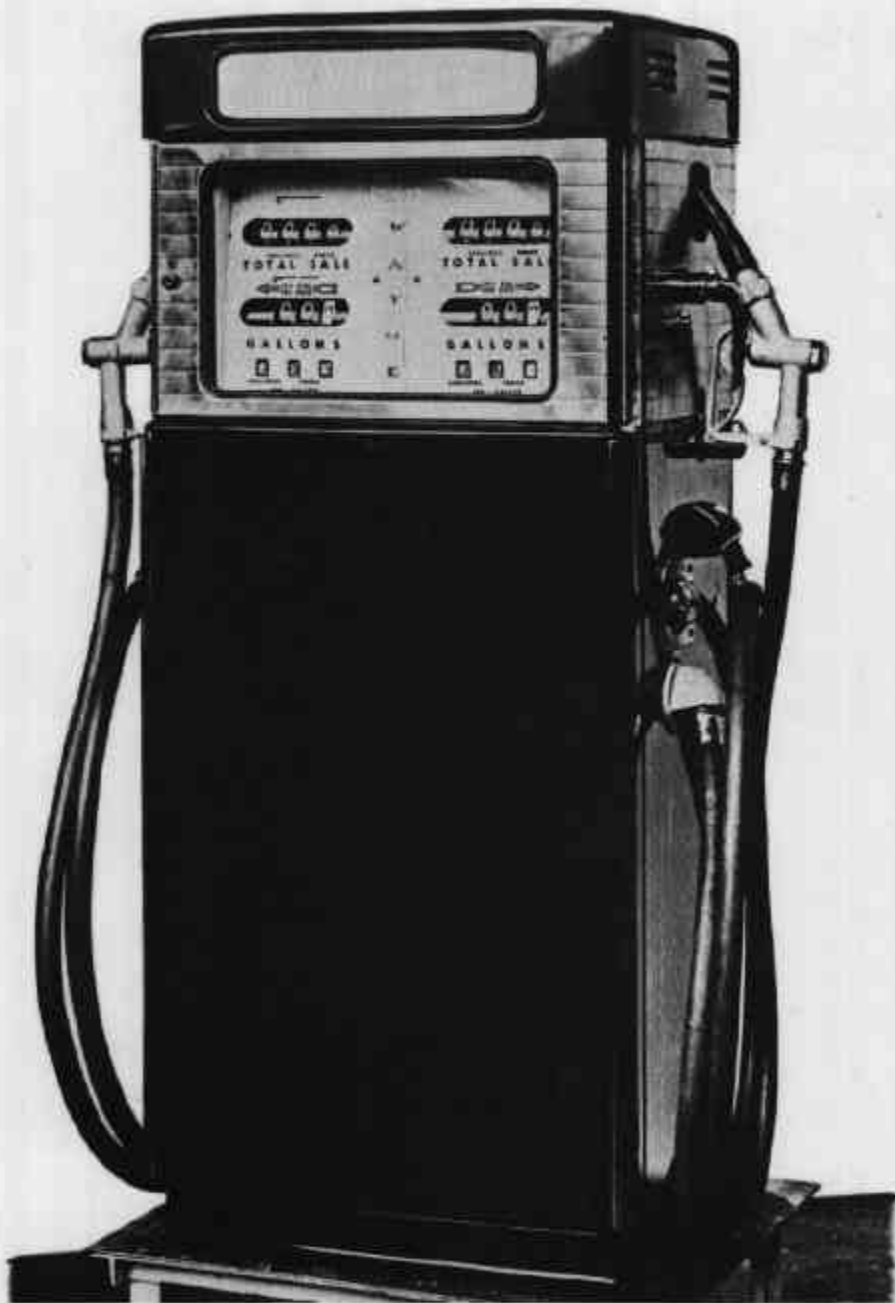
FIGURE 5/6A/48 - 12



Wayne 605 Single — Hydraulic Diagram

20/6/74

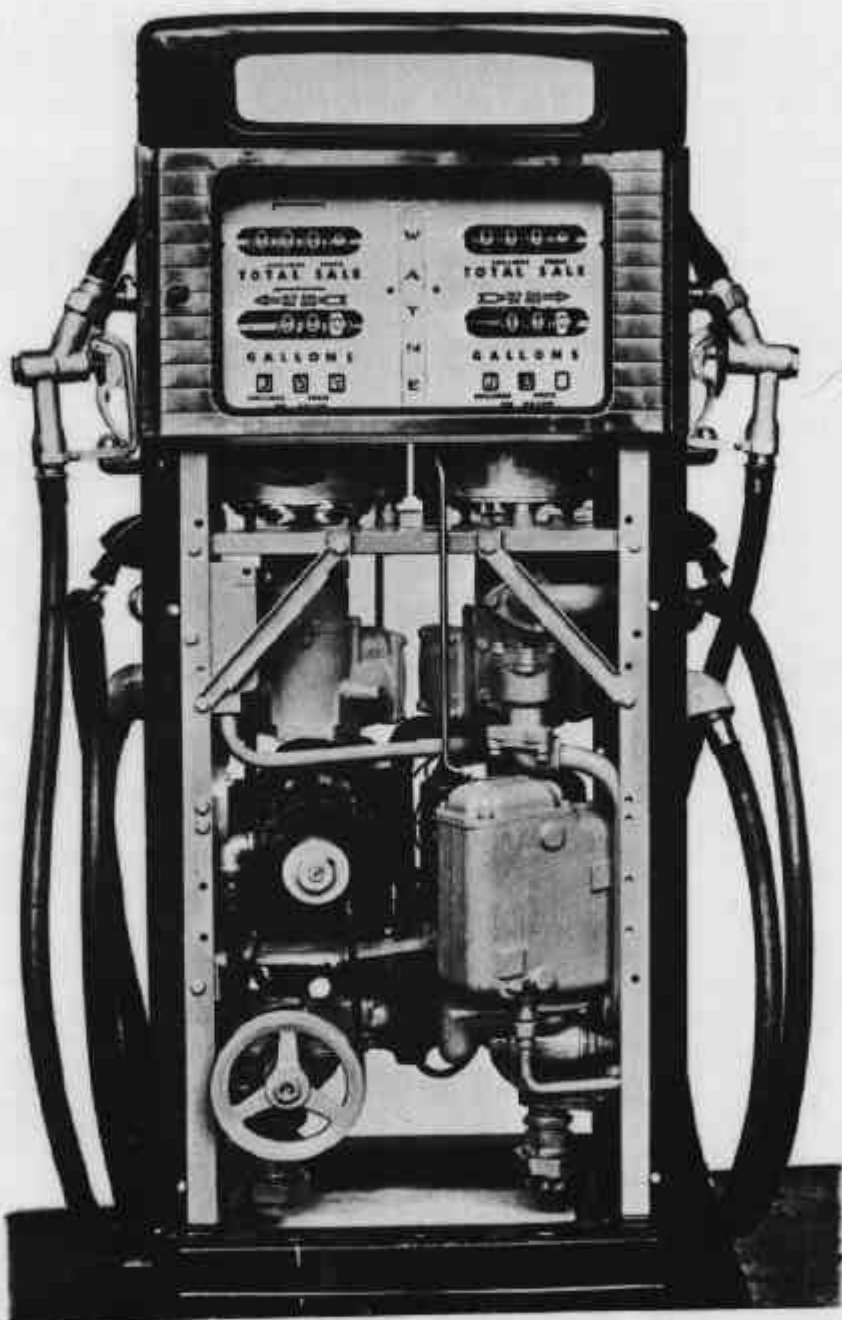
FIGURE 5/6A/48 - 13



Wayne 605 Dual

20/6/74

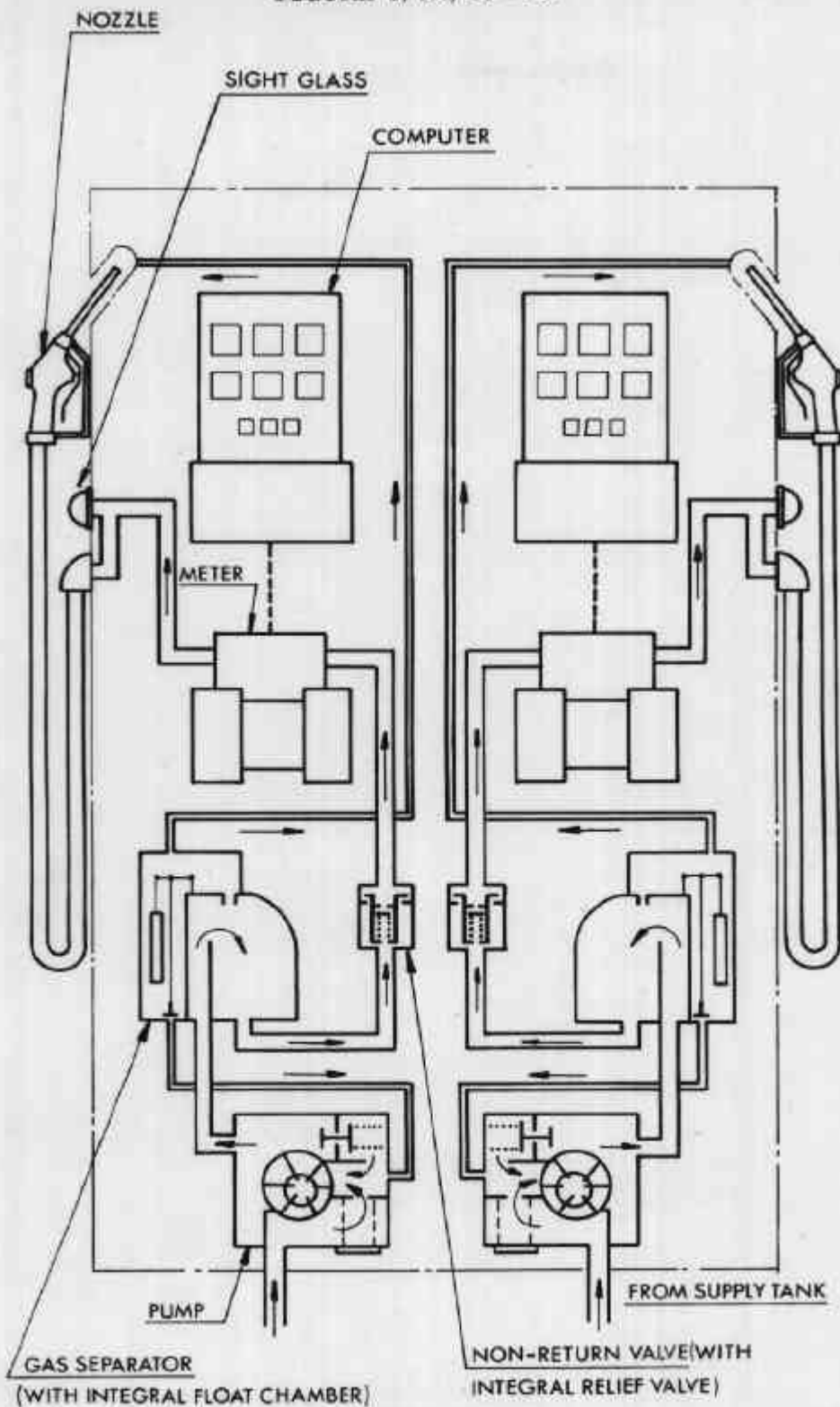
FIGURE 5/6A/48 - 14



Wayne 605 Dual with panels removed

20/6/74

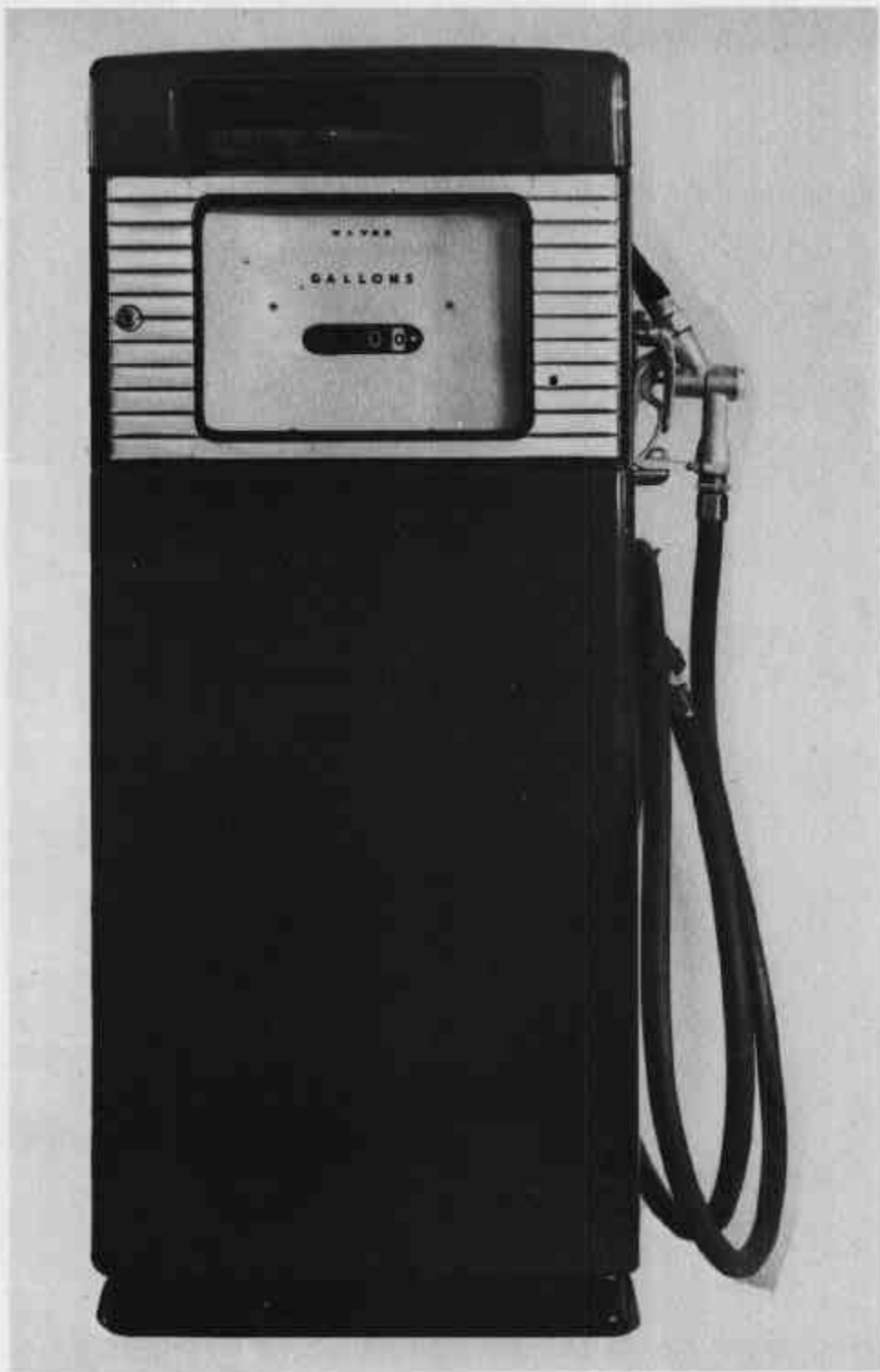
FIGURE 5/6A/48 - 15



Wayne 605 Dual — Hydraulic Diagram

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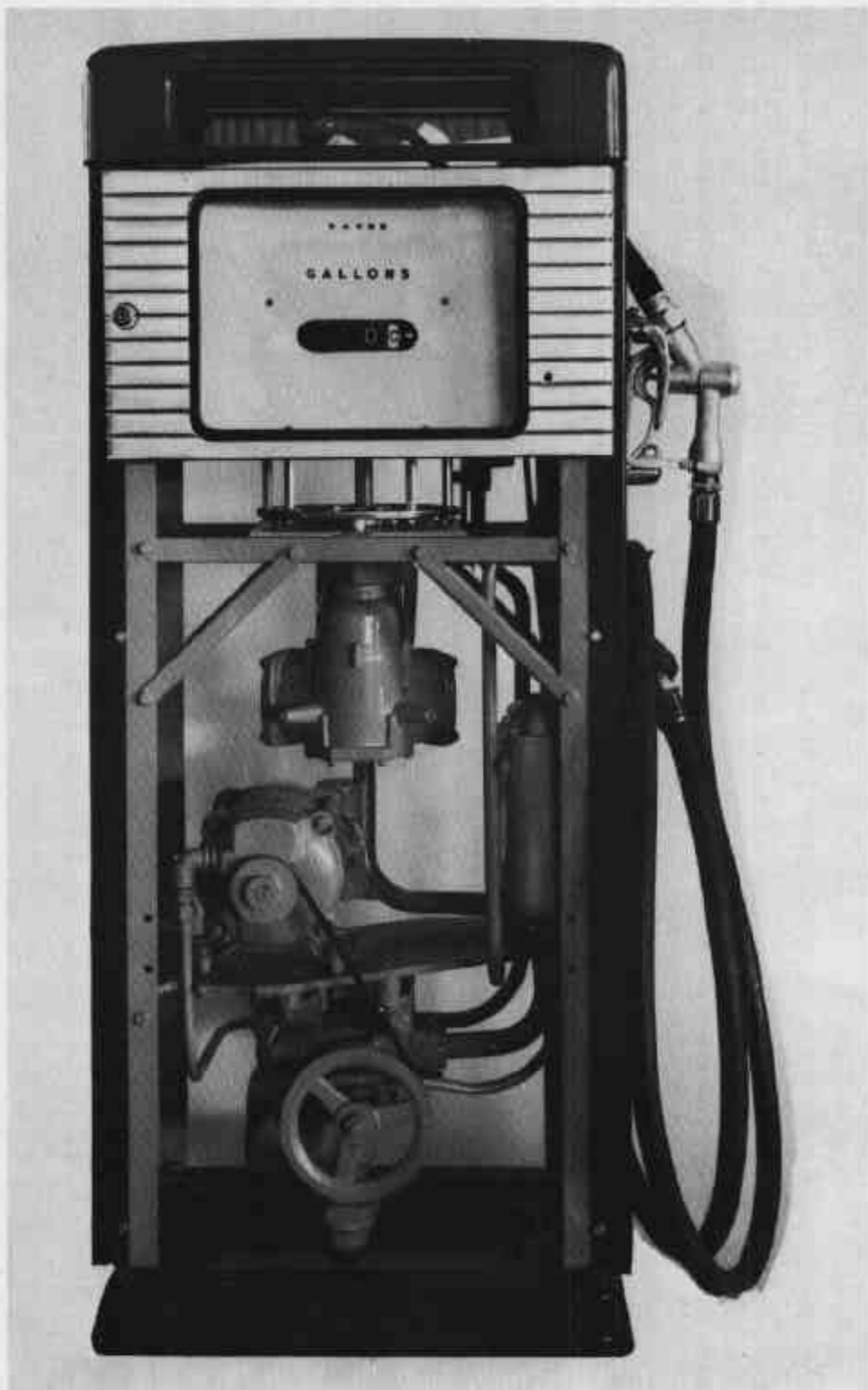
FIGURE 5/6A/48 - 16



Wayne 605/10

20/6/74

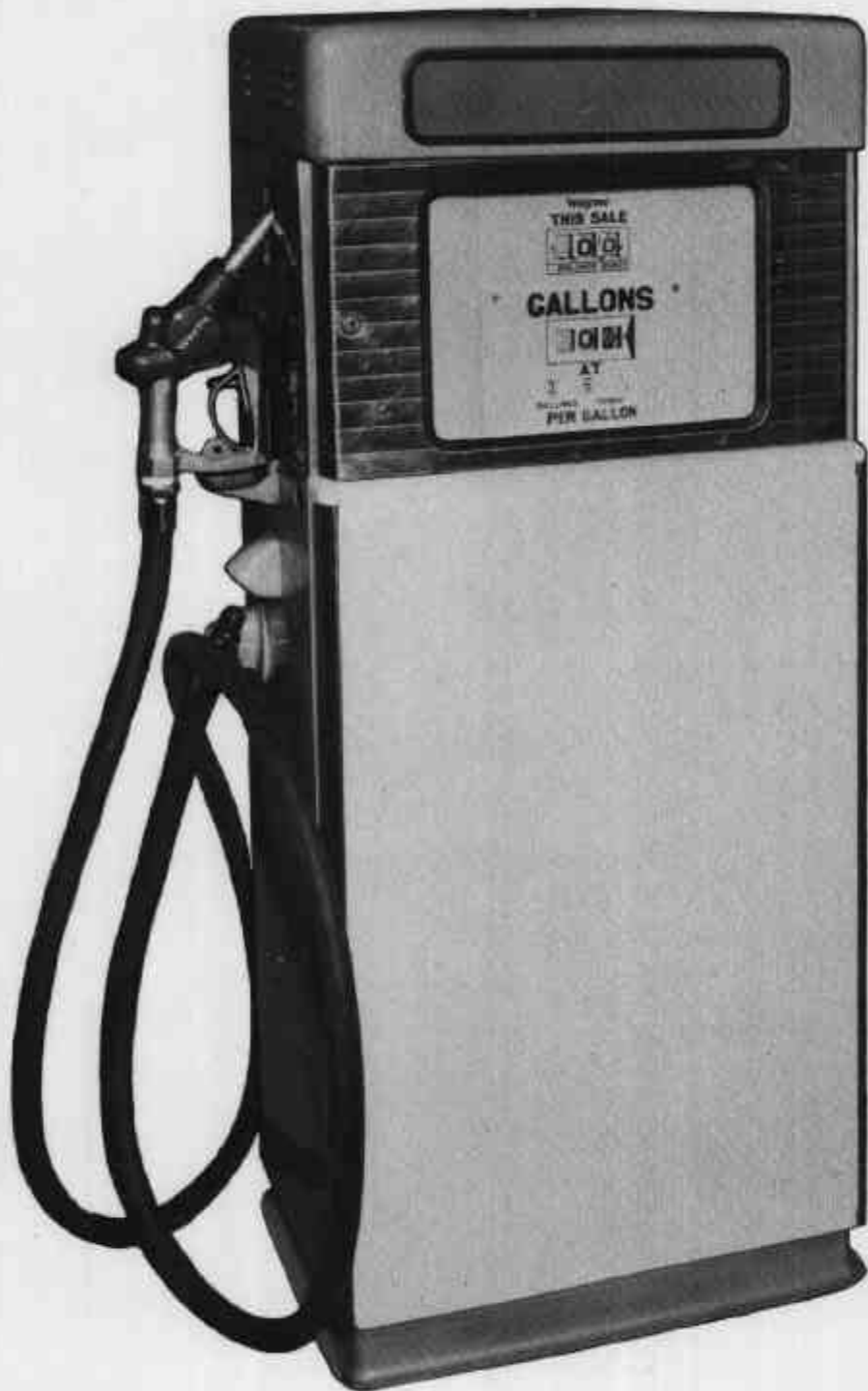
FIGURE 5/6A/48 - 17



Wayne 605/10 with panels removed

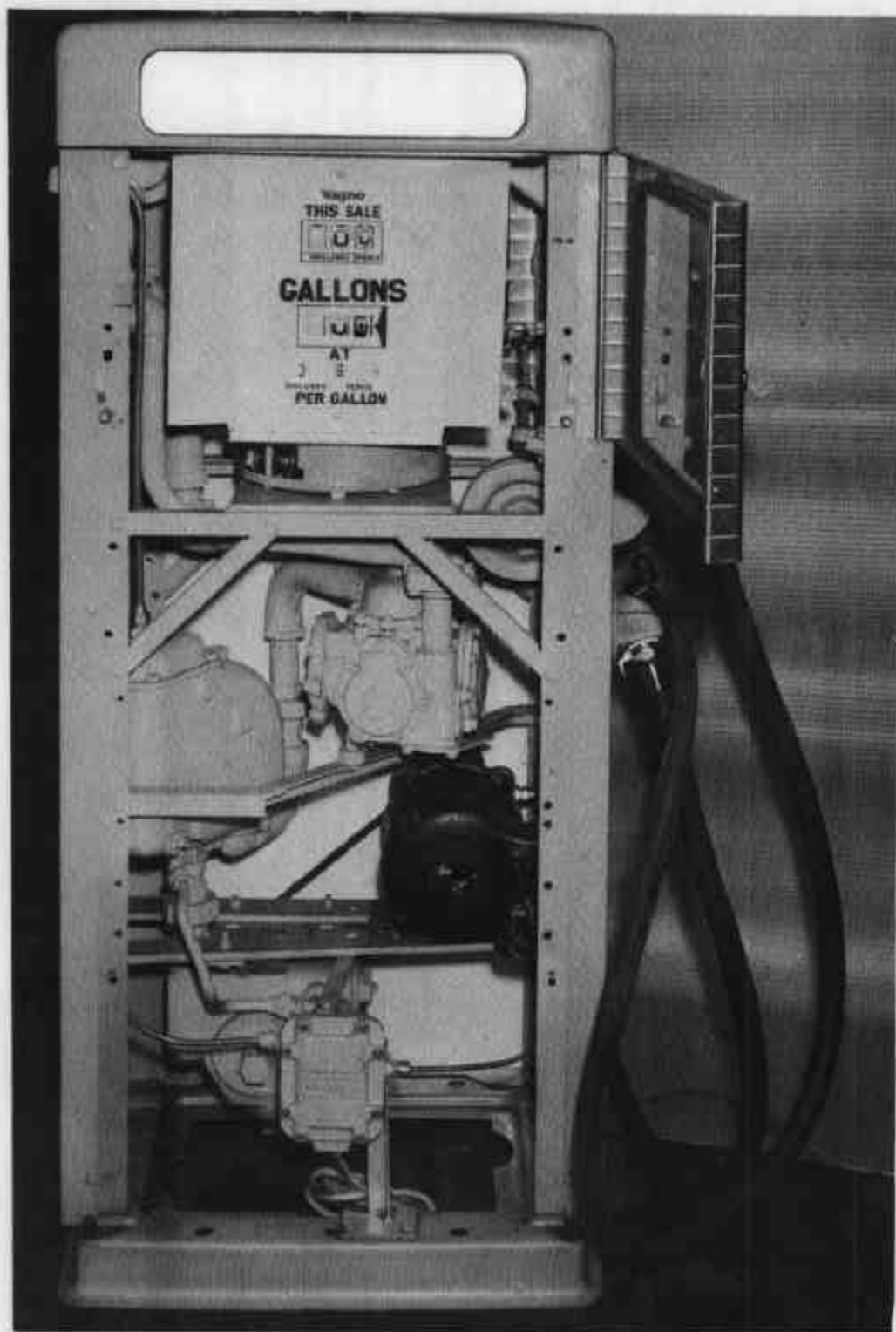
20/6/74

FIGURE 5/6A/48 - 18



Wayne AS10R

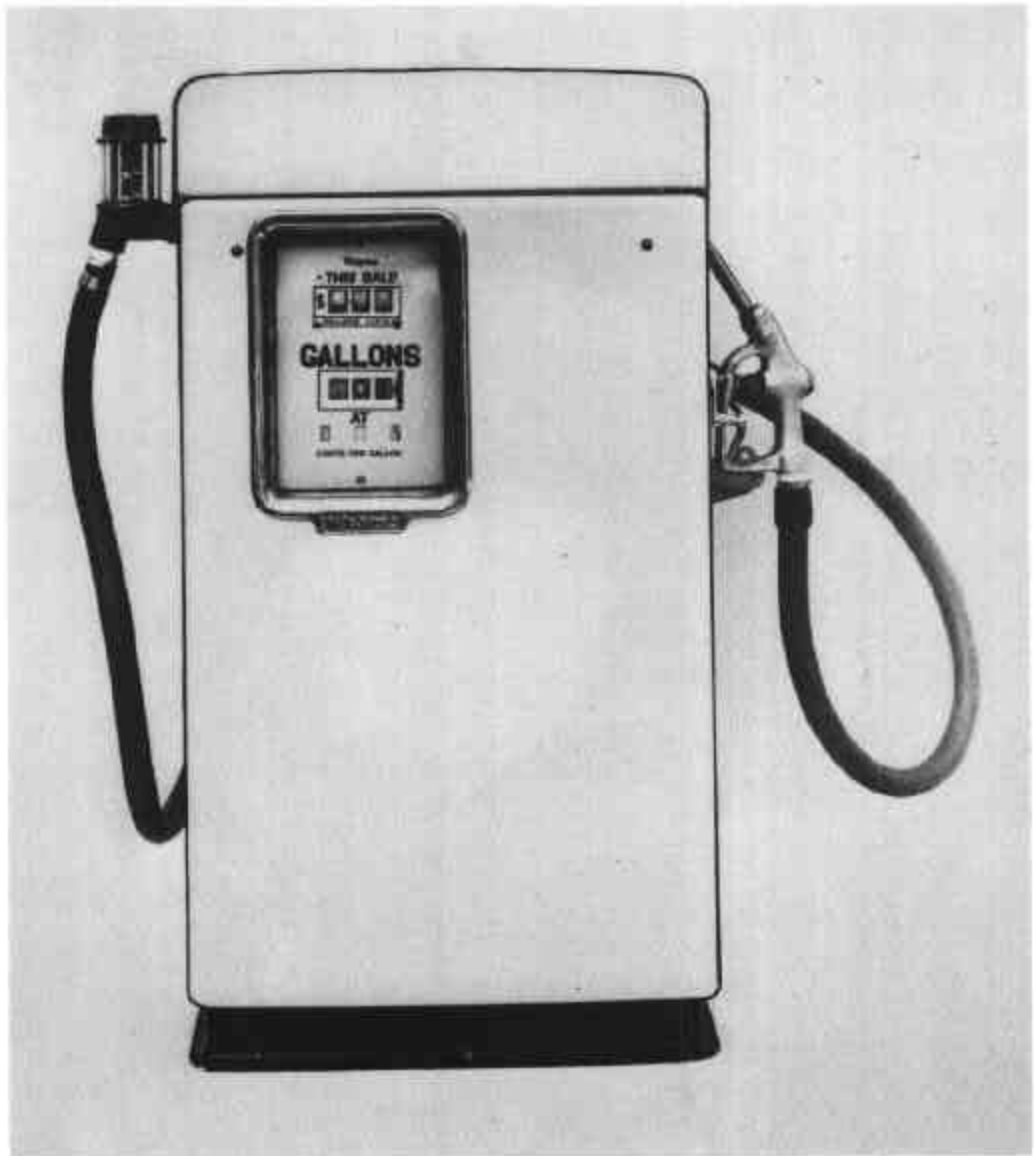
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Wayne AS10R with panels removed

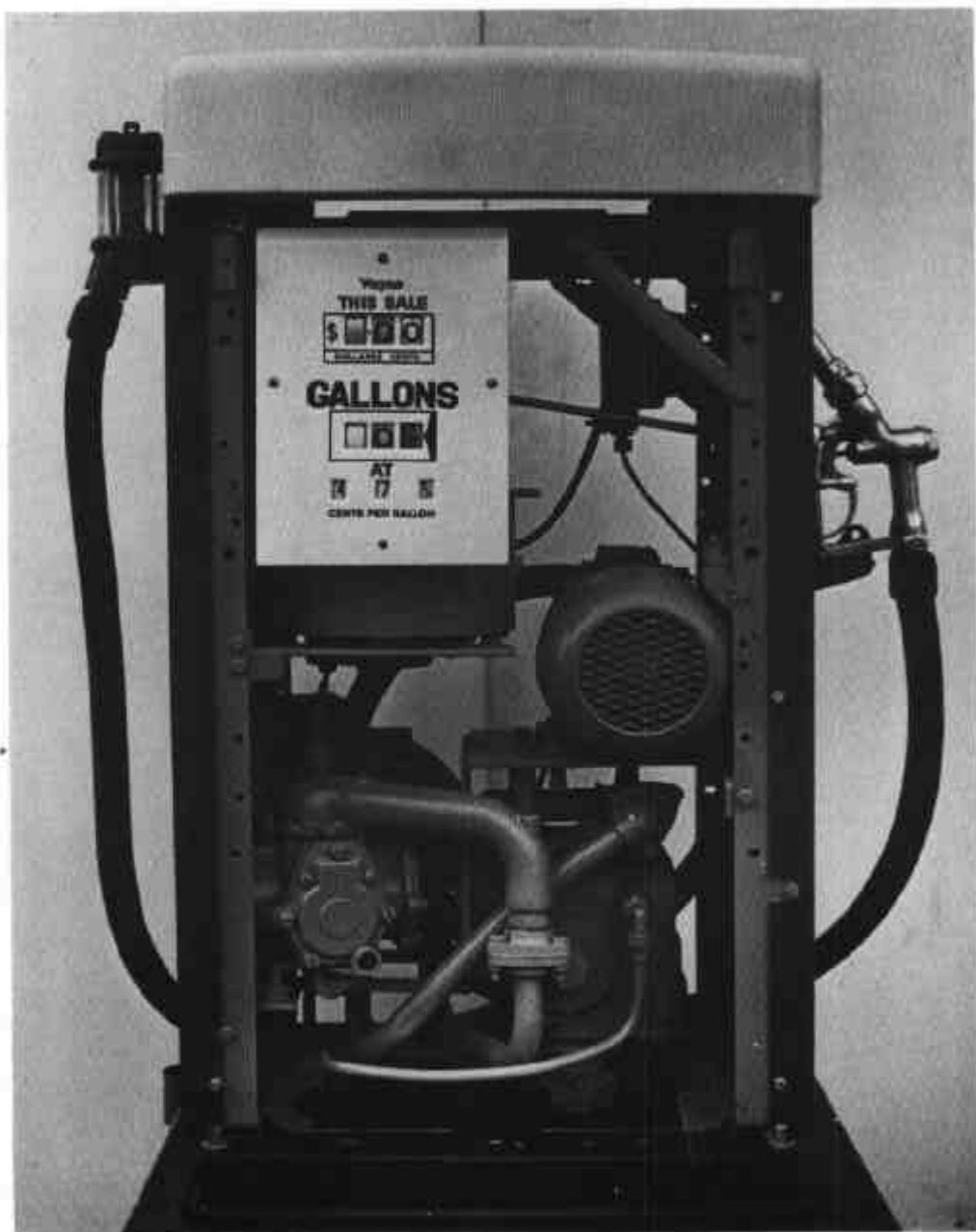
20/6/74

FIGURE 5/6A/48 - 20



Wayne 600 MRC

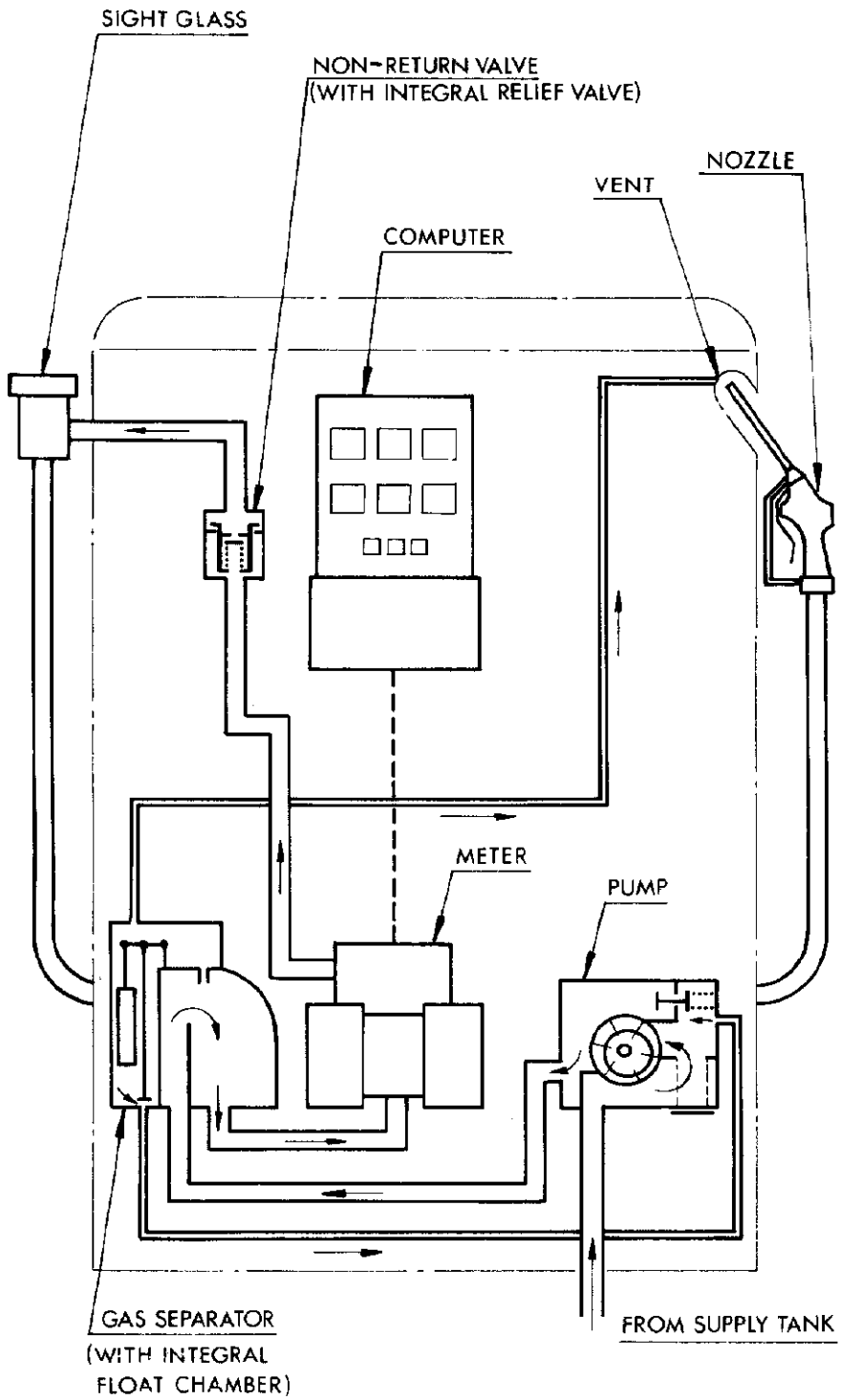
20/6/74



Wayne 600 MRC with panels removed

20/6/74

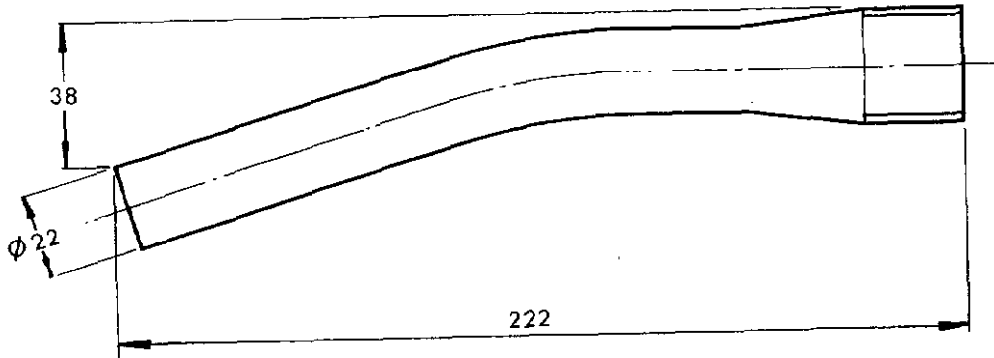
FIGURE 5/6A/48 - 22



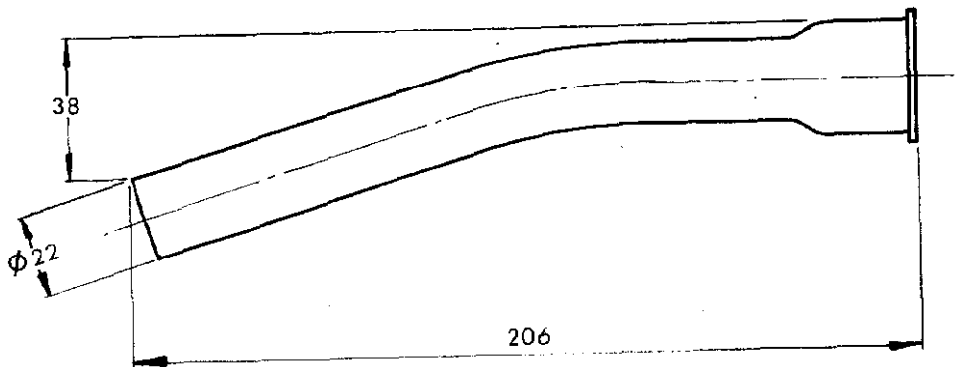
Wayne 600 MRC — Hydraulic Diagram

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FIGURE 5/6A/48 - 23



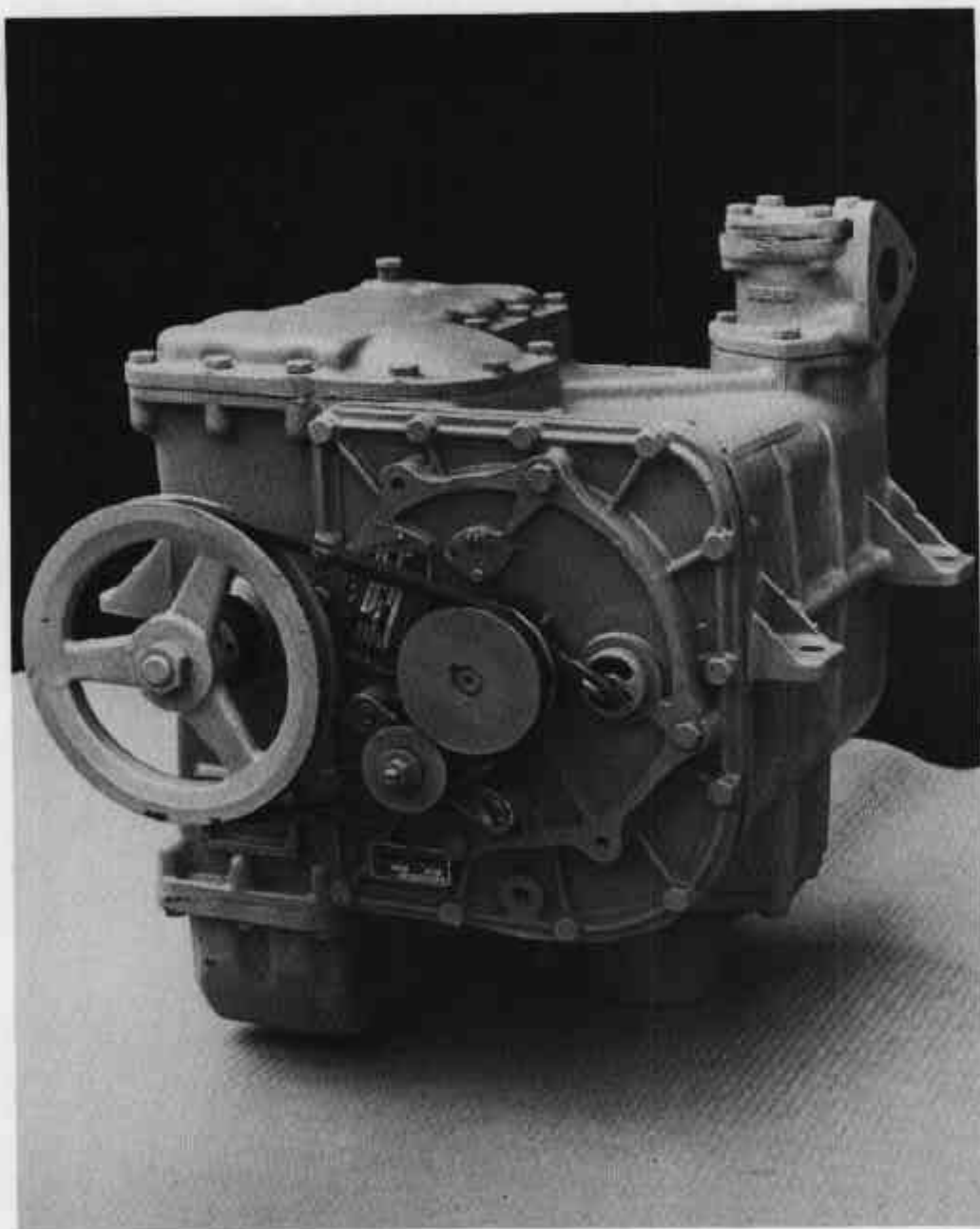
DIMENSIONS IN mm



Wayne Rigid Spouts — Schematic Diagram

20/6/74

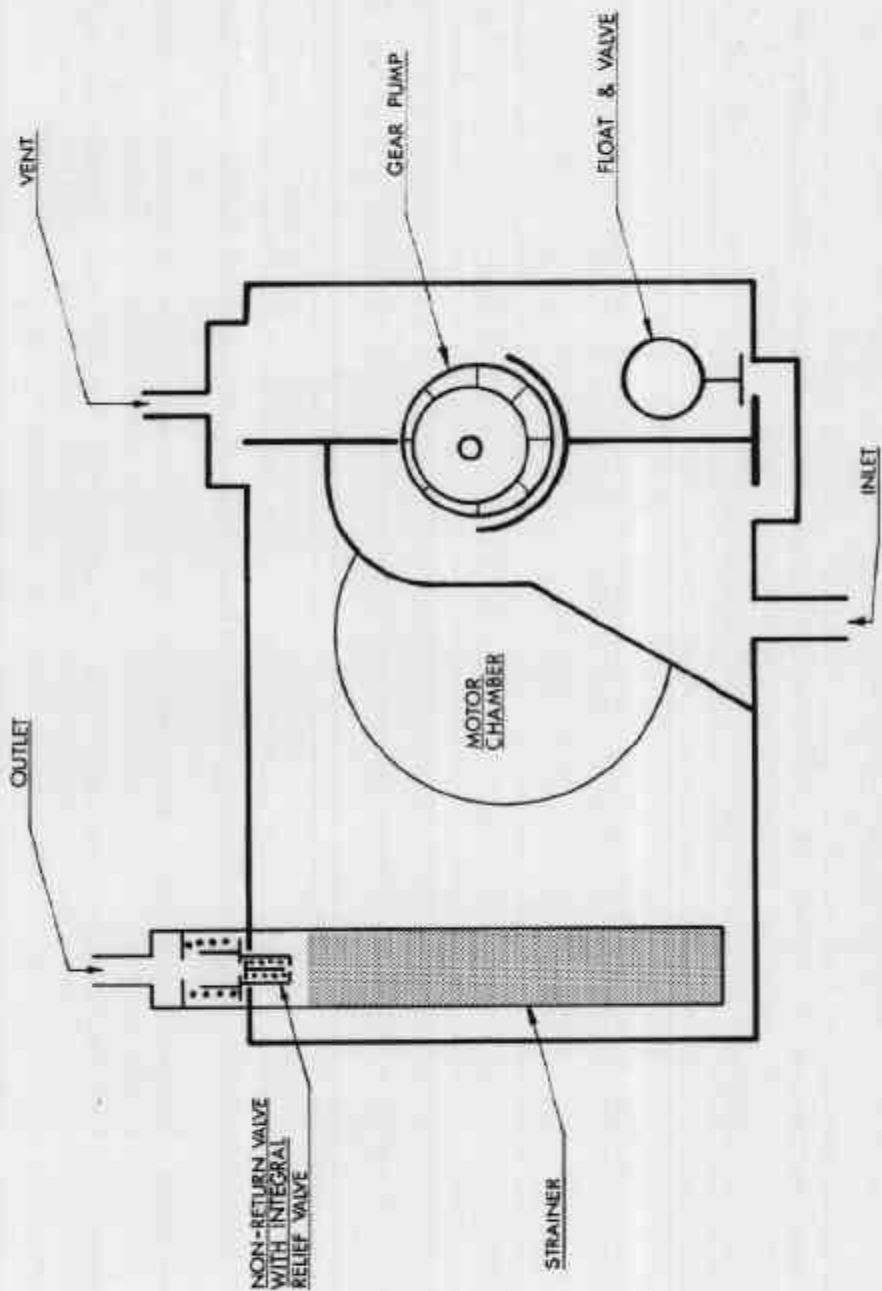
FIGURE 5/6A/48 - 24



Wayne P4682 Pump with Integral Gas Separator
and Non-return Valve

20/6/74

FIGURE 5/6A/48 - 25



Wayne P4682 Pump with Integral Gas Separator
and Non-return Valve — Schematic Diagram

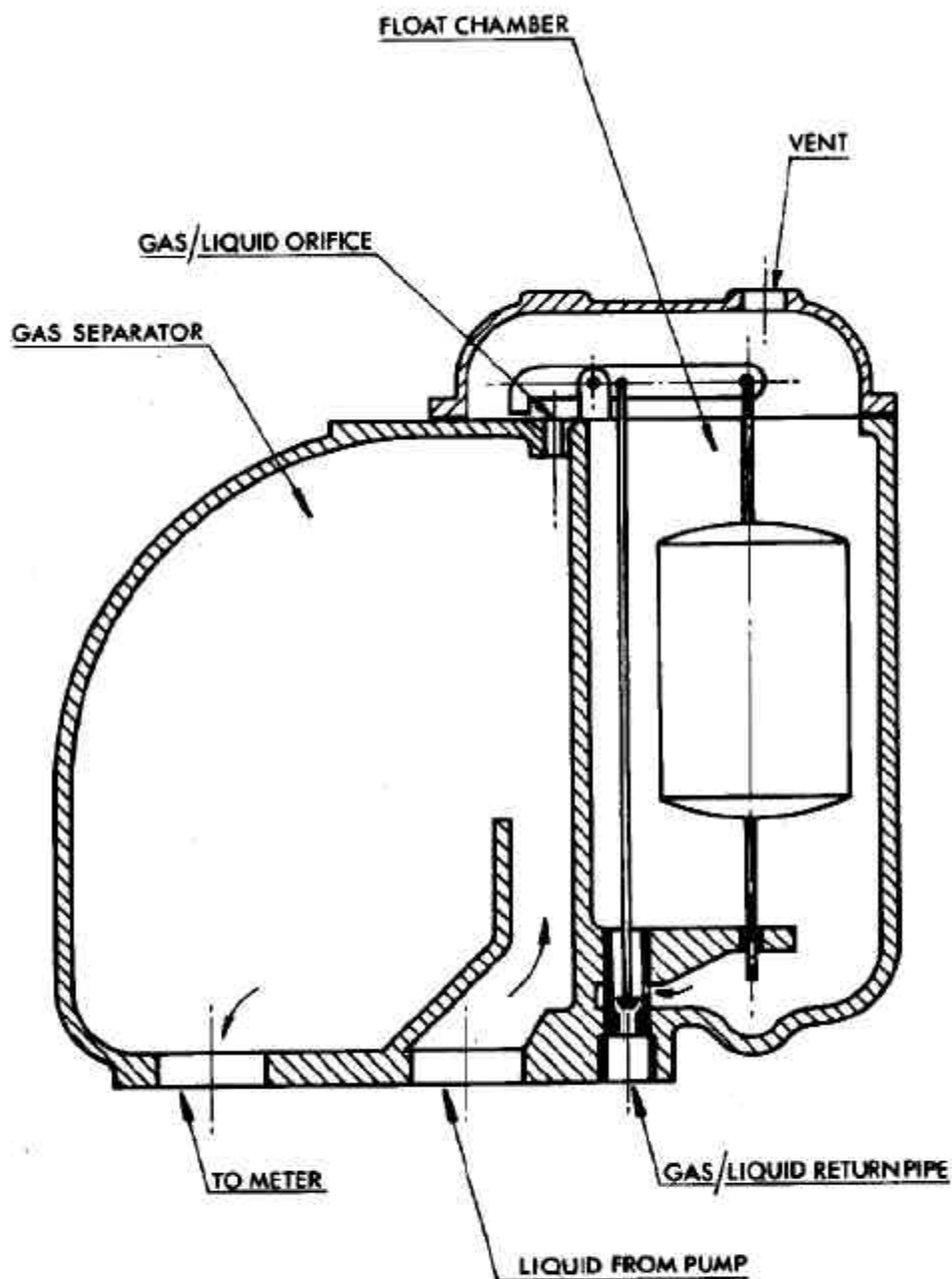
FIGURE 5/6A/48 - 26



Wayne P5184 Gas Separator

20/6/74

FIGURE 5/6A/48 - 27



Wayne P5184 Gas Separator — Schematic Diagram

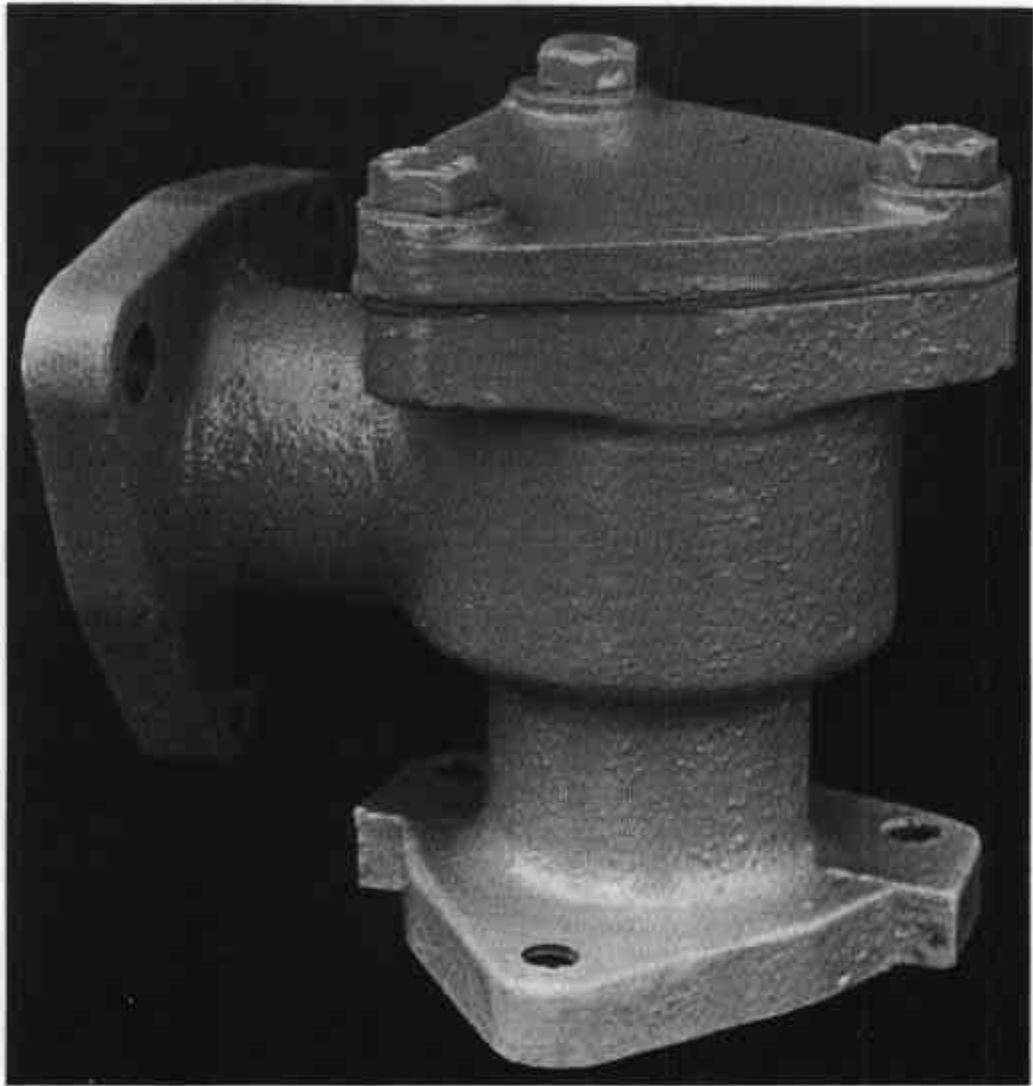
20/6/74



Wayne P3451 Non-return Valve

20/6/74

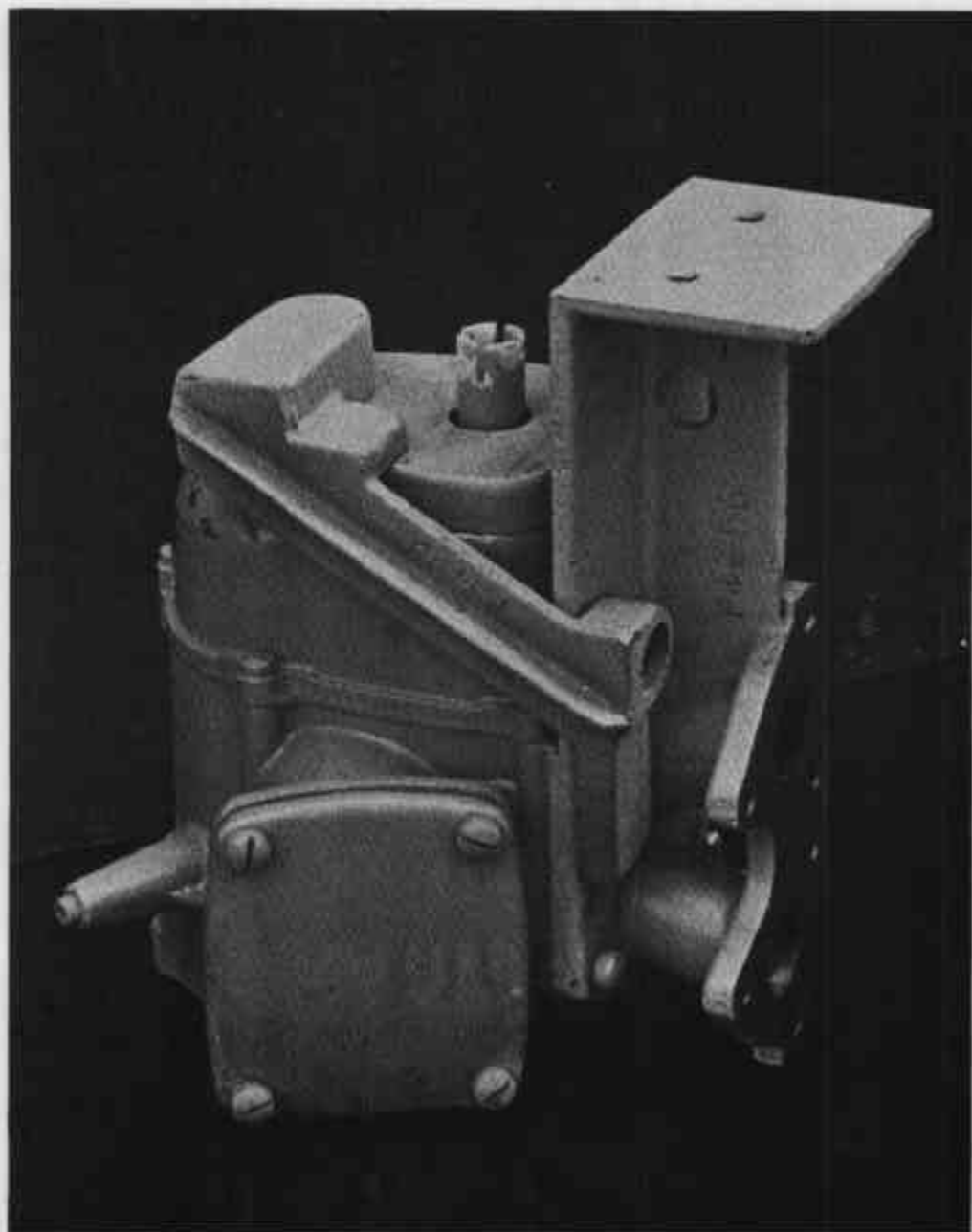
FIGURE 5/6A/48 - 29



Wayne P5687 Non-return Valve

20/6/74

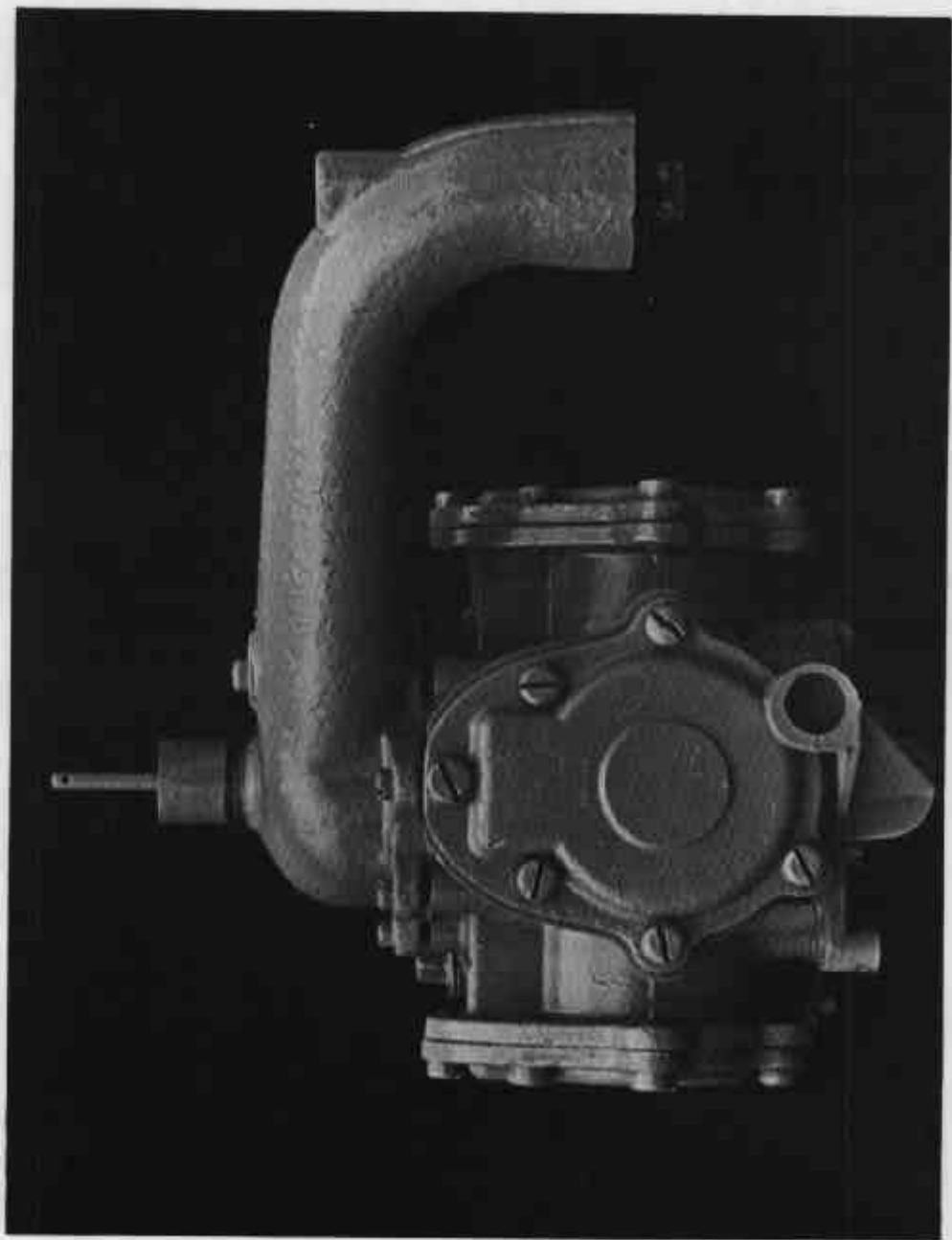
FIGURE 5/6A/48 - 30



Wayne P4685 Meter

20/6/74

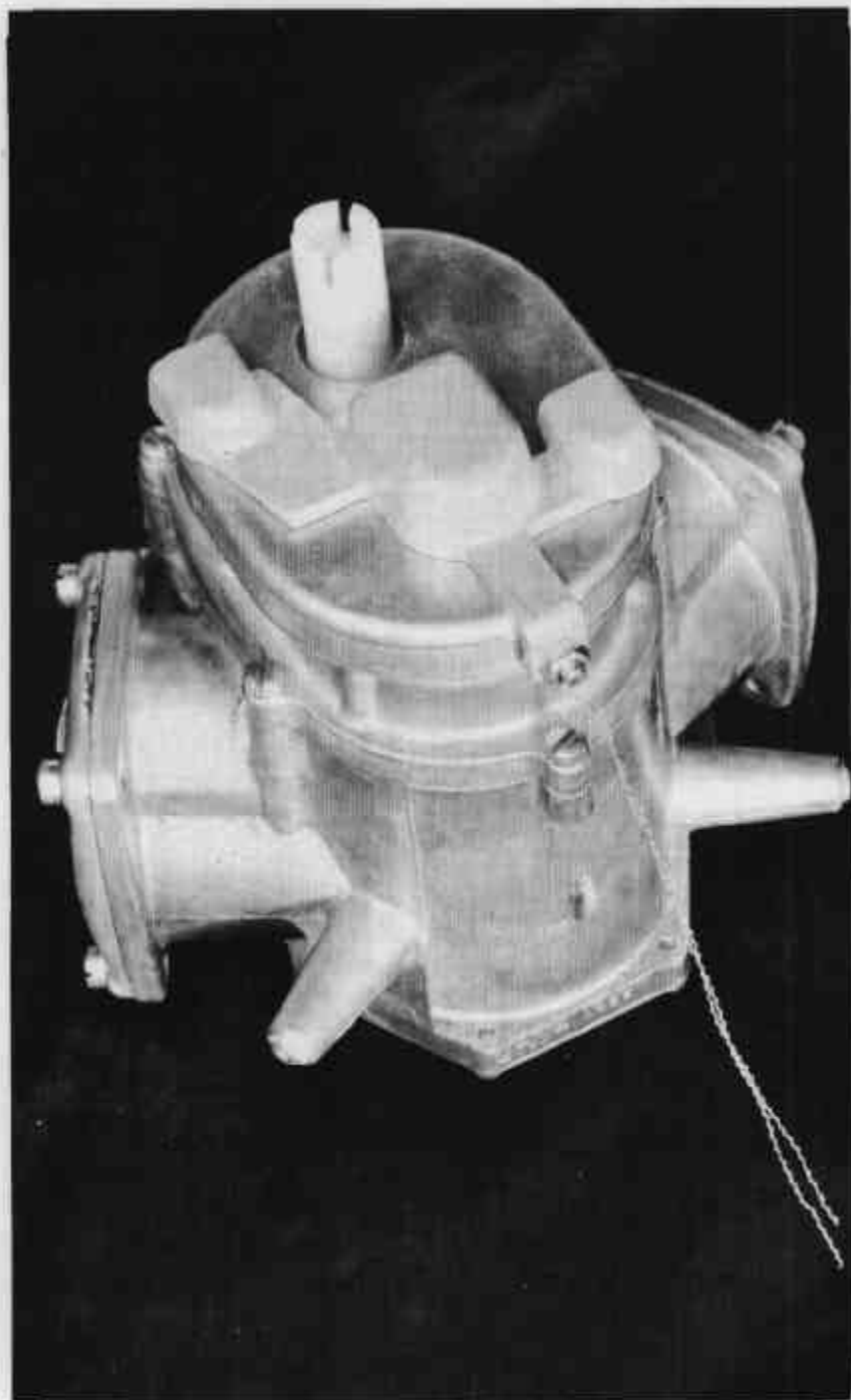
FIGURE 5/6A/48 - 31



Wayne P3899 Meter

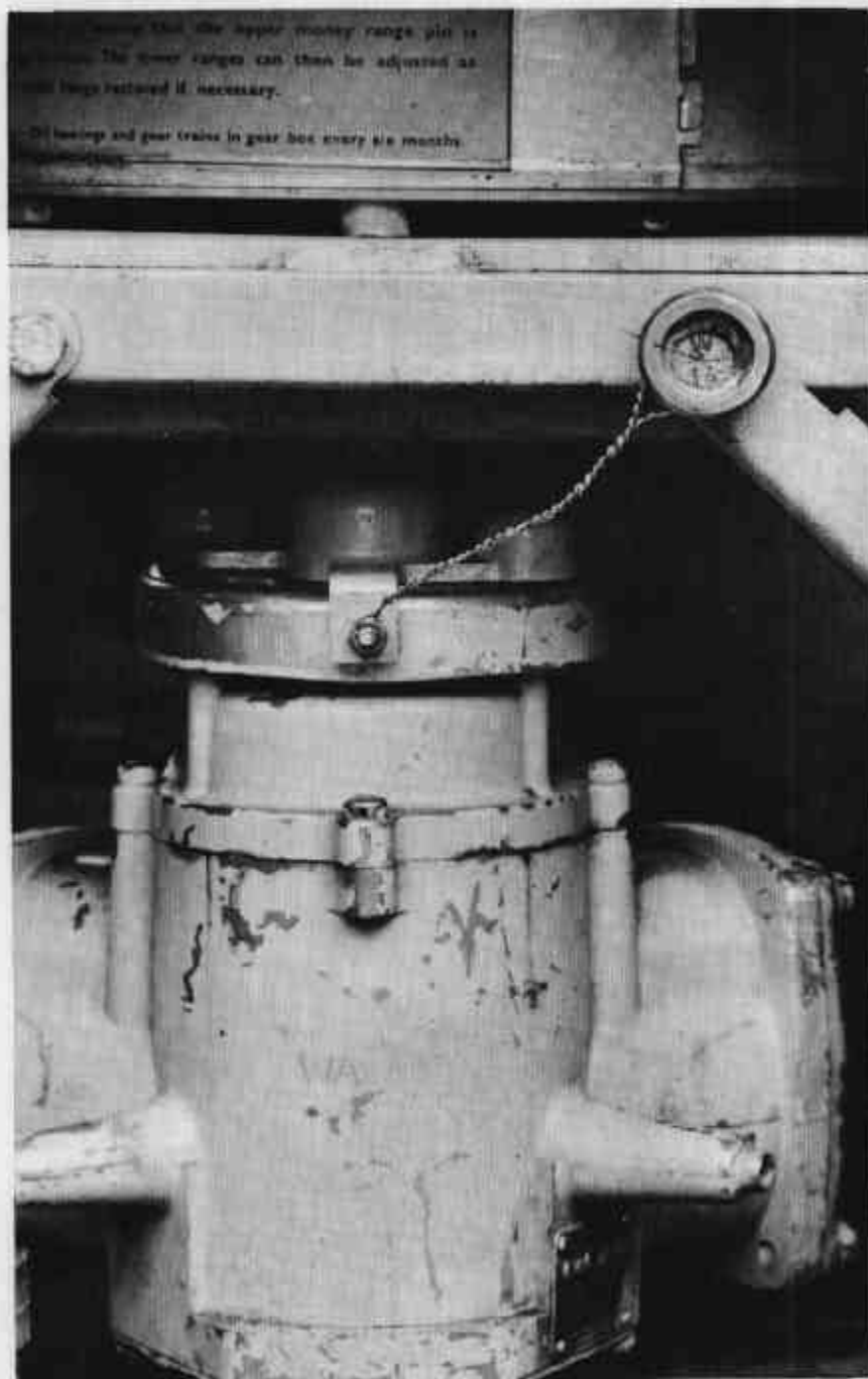
20/6/74

FIGURE 5/6A/48 - 32



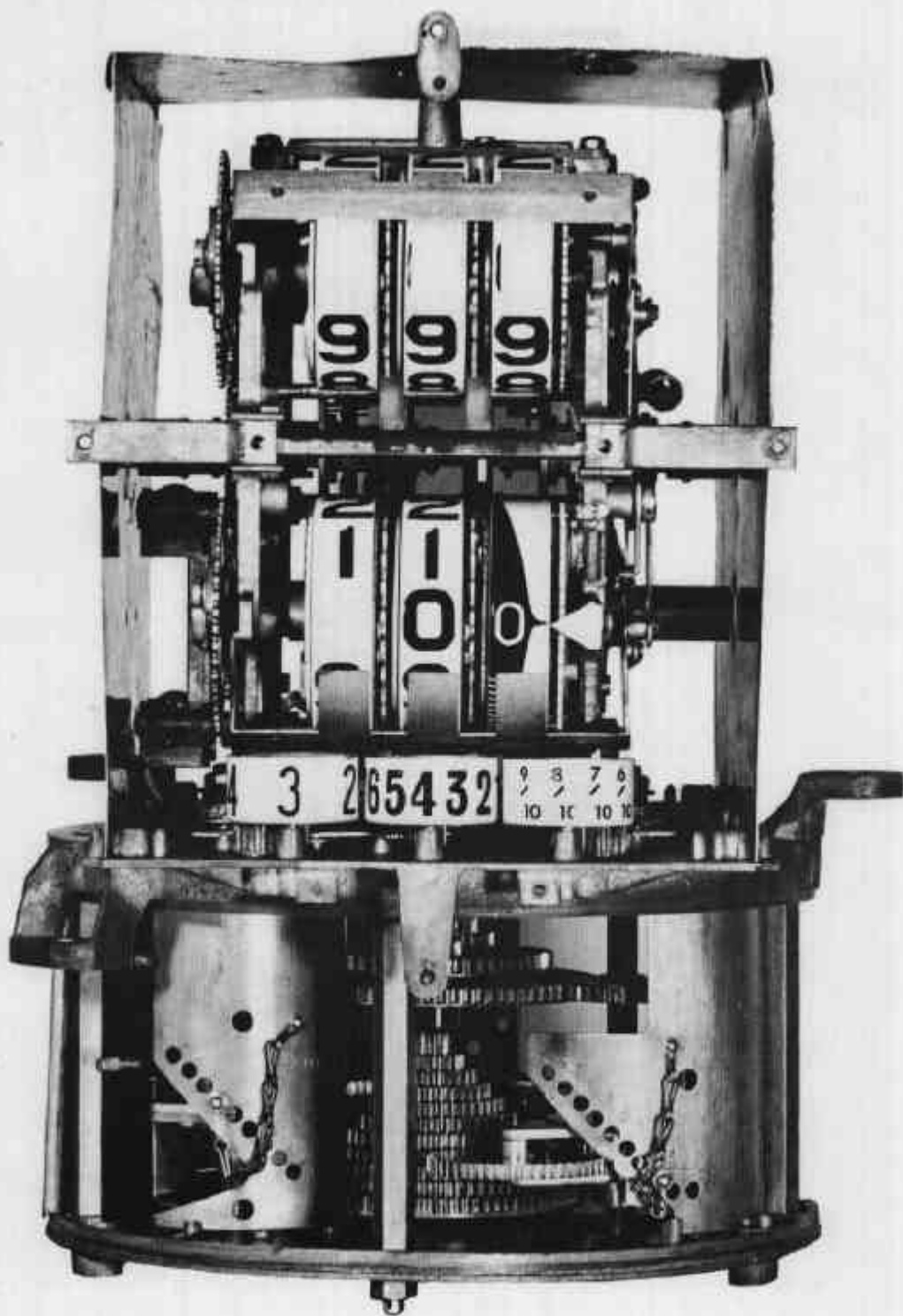
Wayne P8765 Meter

20/6/74



Wayne P8765 Meter — Sealing

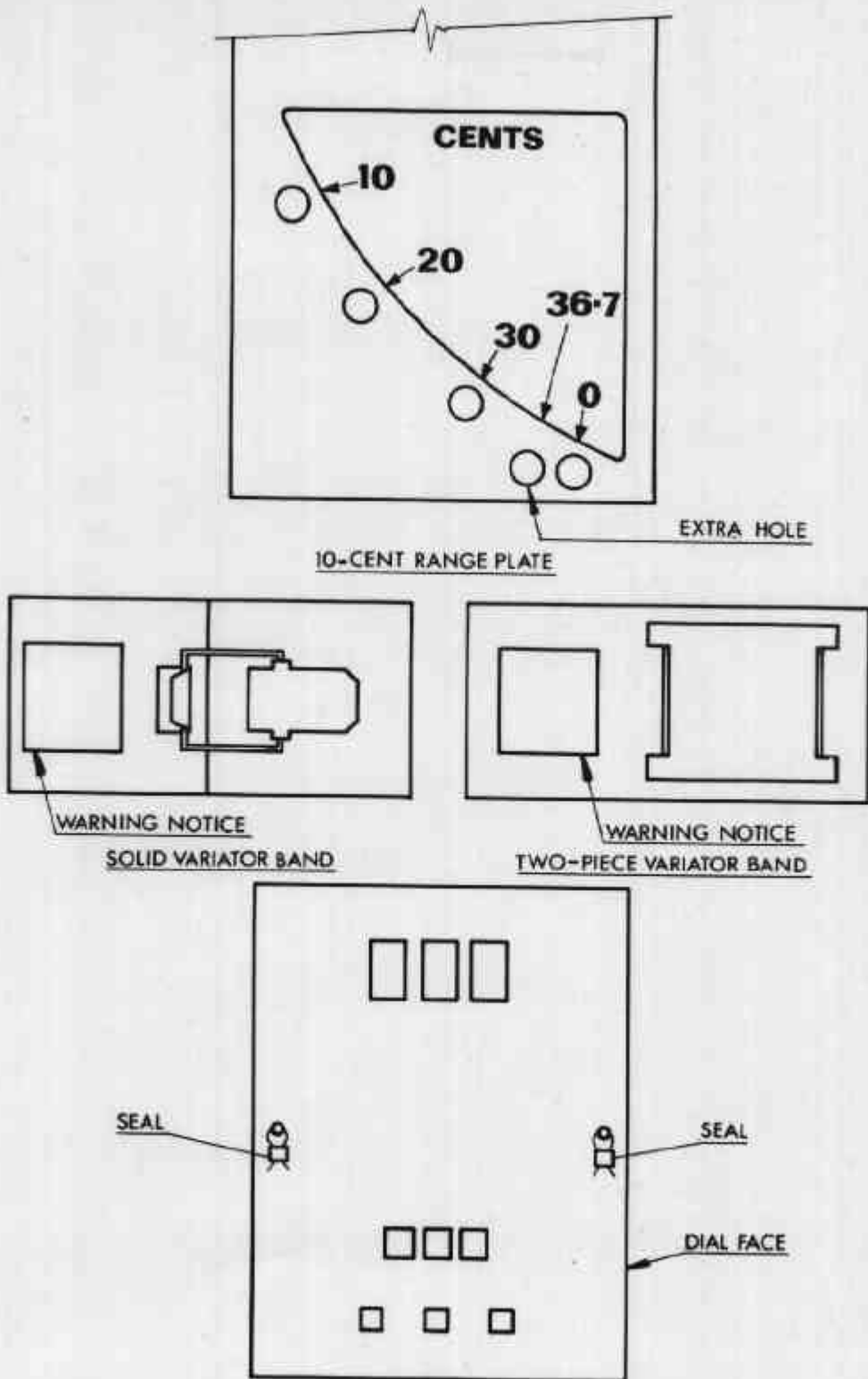
20/6/74



Veeder-Root M36 Computer

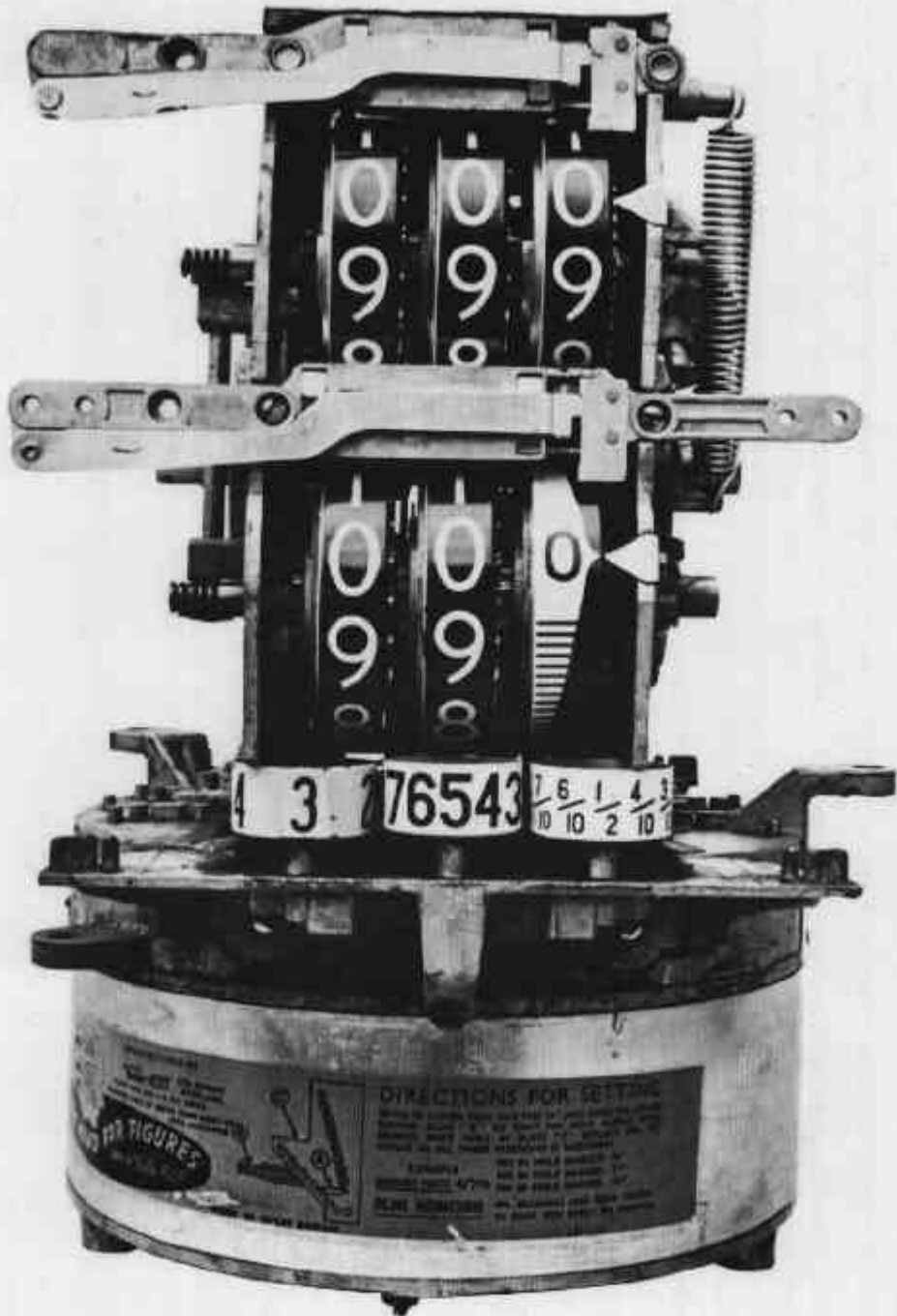
20/6/74

FIGURE 5/6A/48 - 35



Veeder-Root M36 Computer — Extension of Unit Price
from 39,9 to 46,6 cents per litre

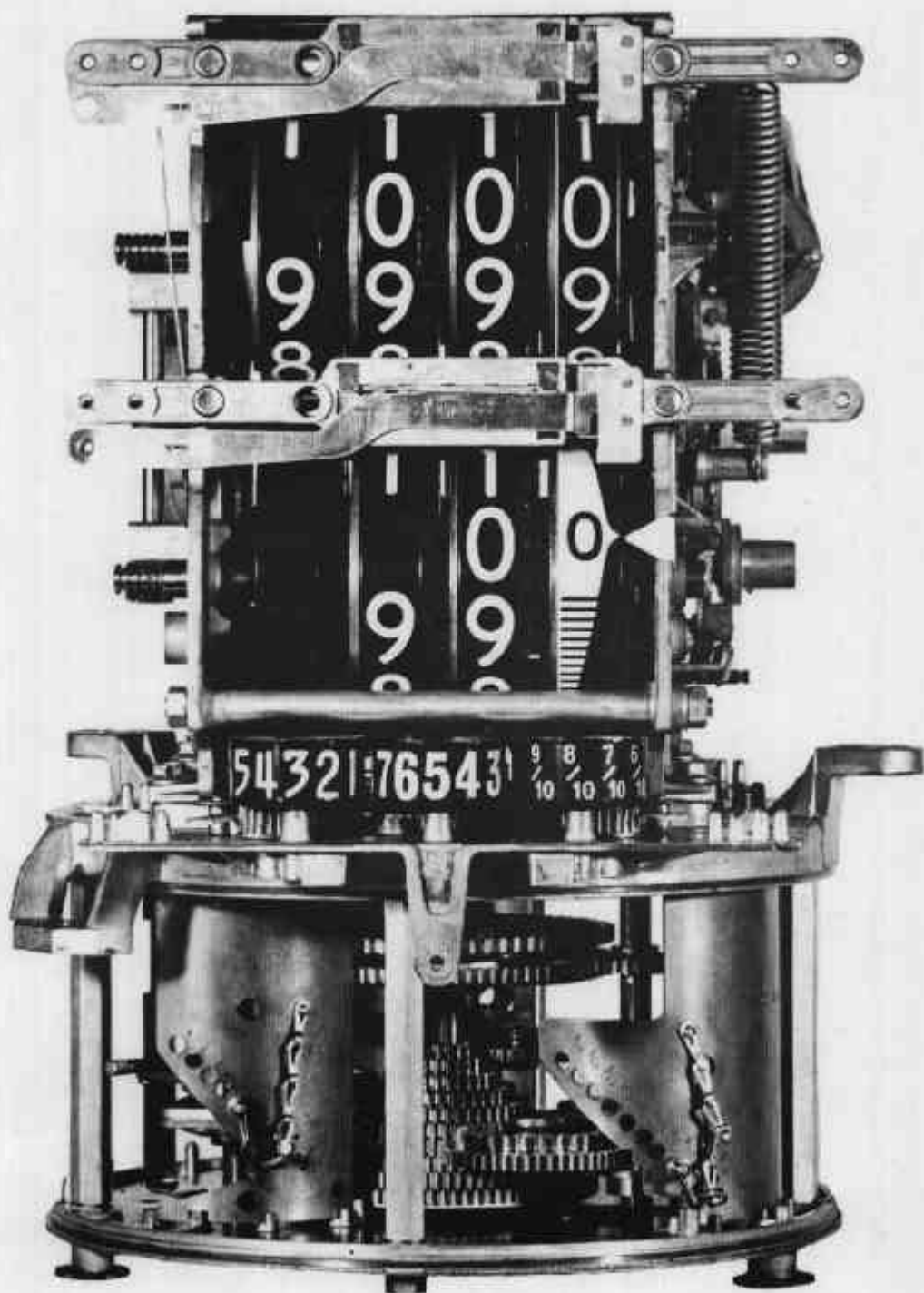
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Veeder-Root M56 Computer

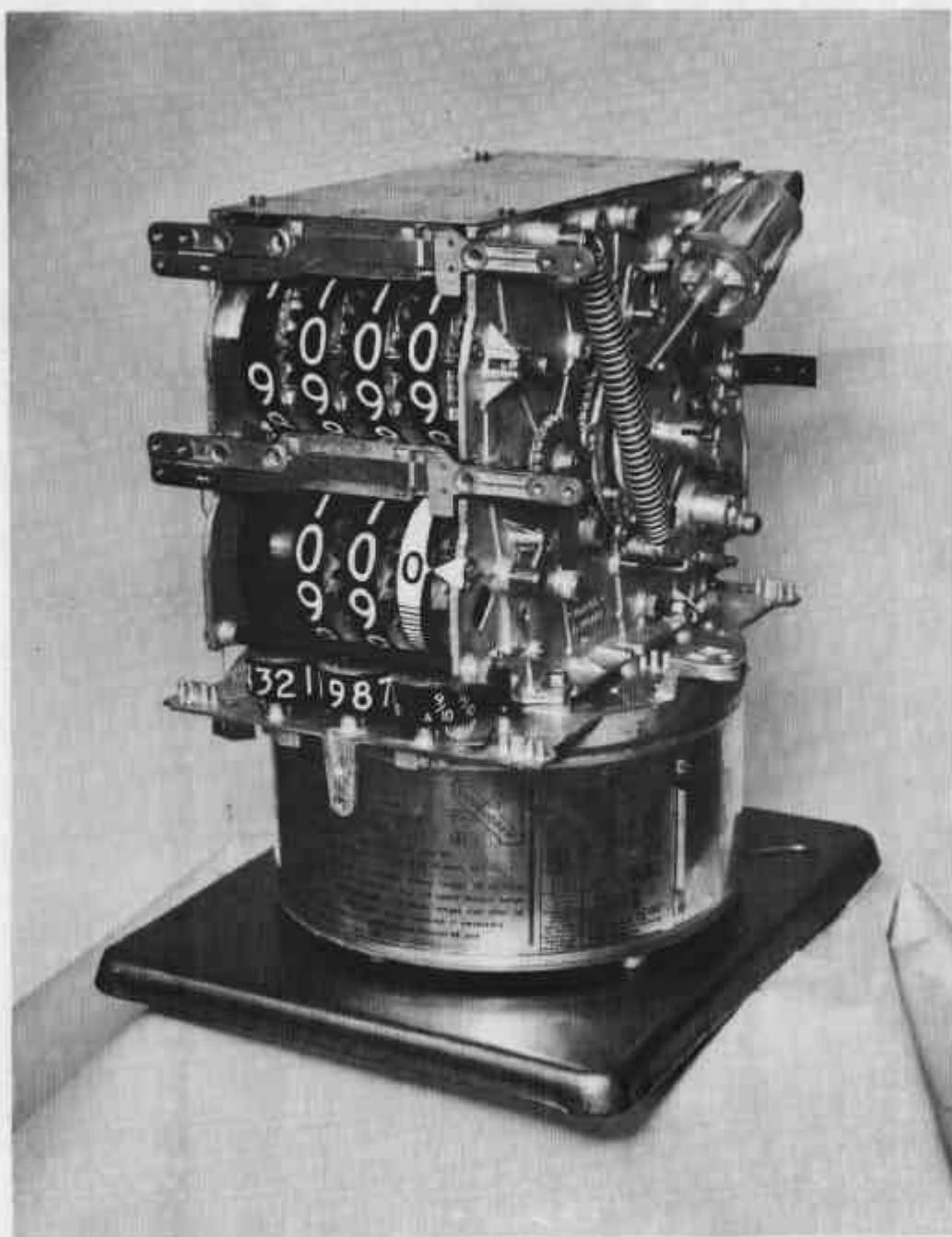
20/6/74

FIGURE 5/6A/48 - 37



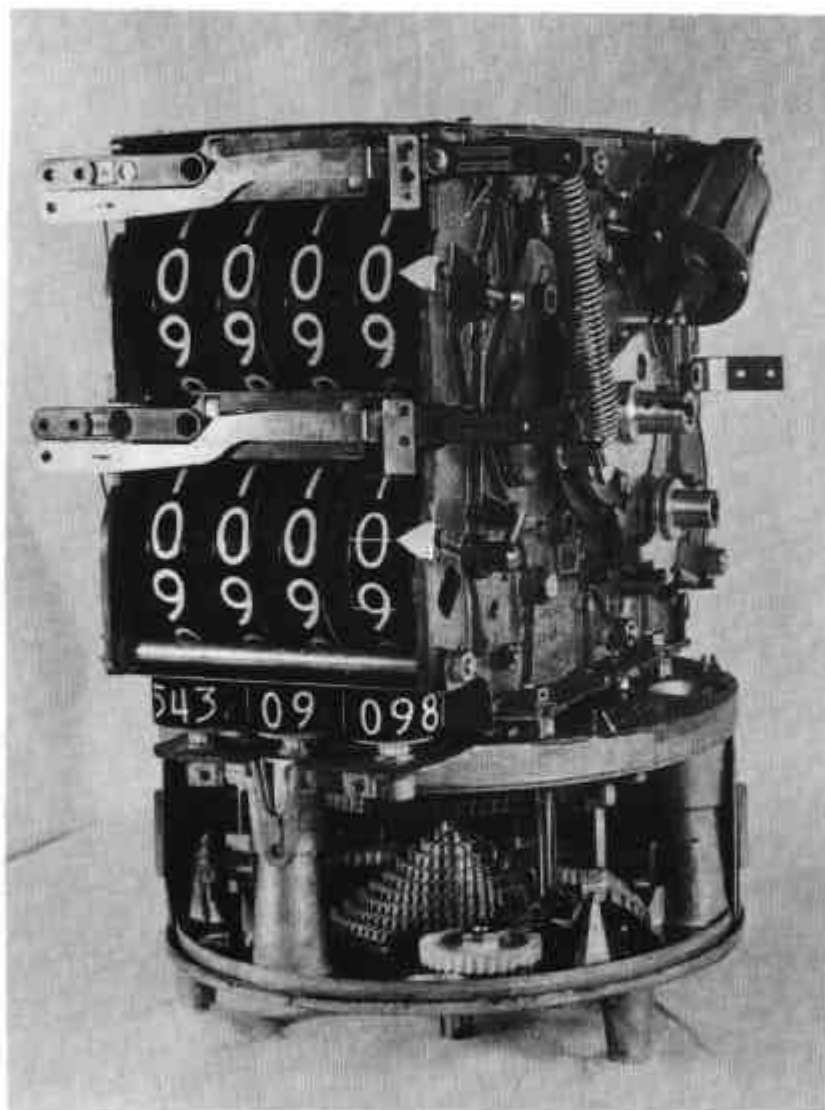
Veeder-Root 1611 Computer

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Veeder-Root 1613 Computer

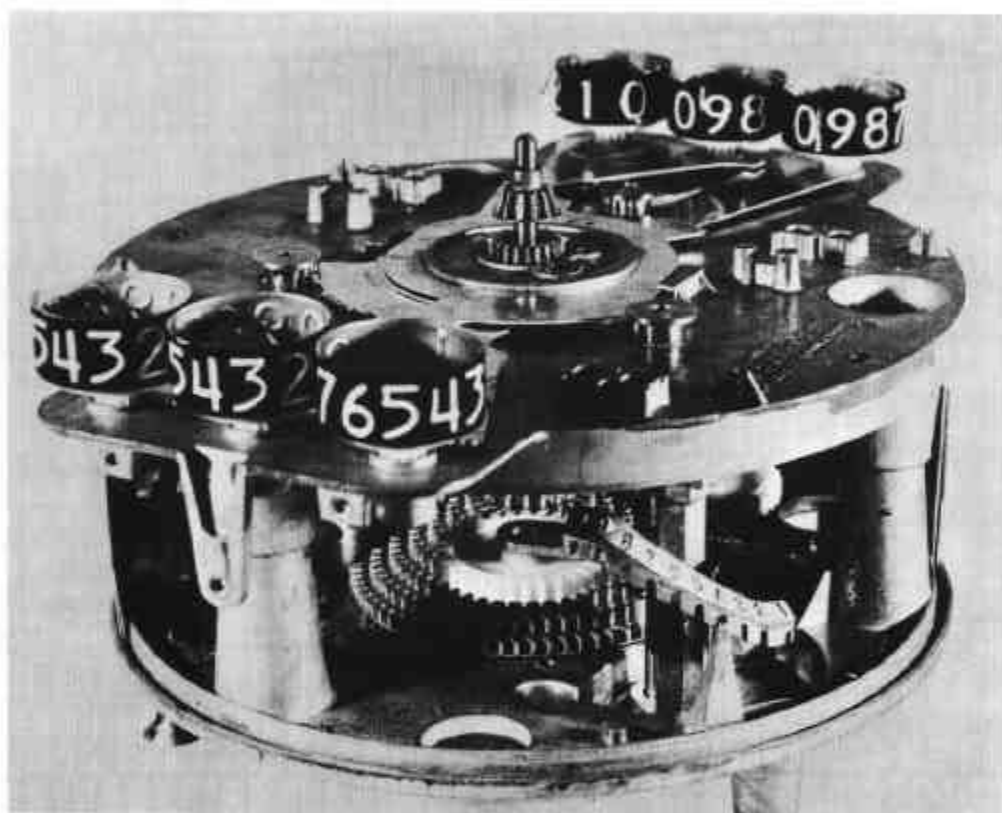
20/6/74



Veeder-Root Computer Model VR 101

20/6/74

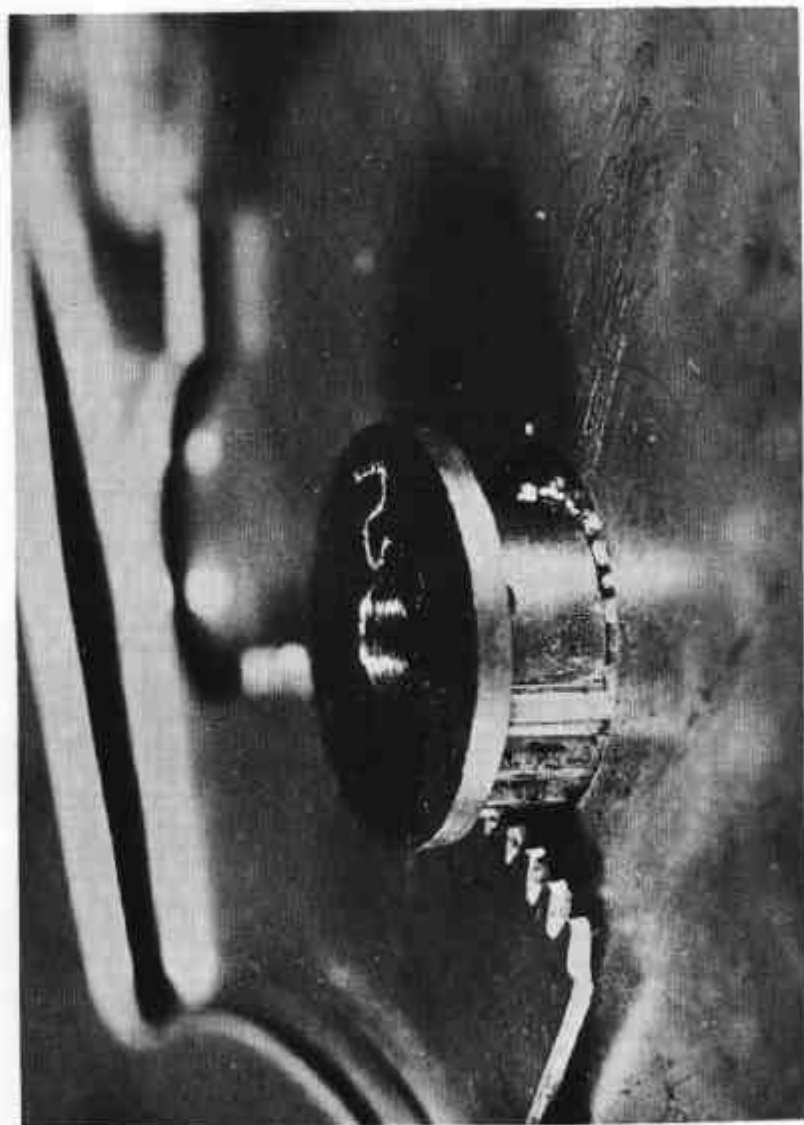
FIGURE 5/6A/48 - 40



Veeder-Root Computer Model VR 101 — Variator

20/6/74

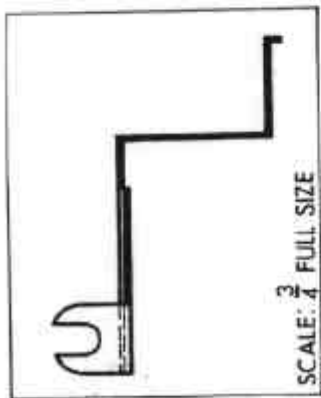
FIGURE 5/6A/48 - 41



Veeder-Root Computer Model VR 101 — Pinned Shield

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FIGURE 5/6A/48 - 42



A

VIEW ON AA
SEE INSET

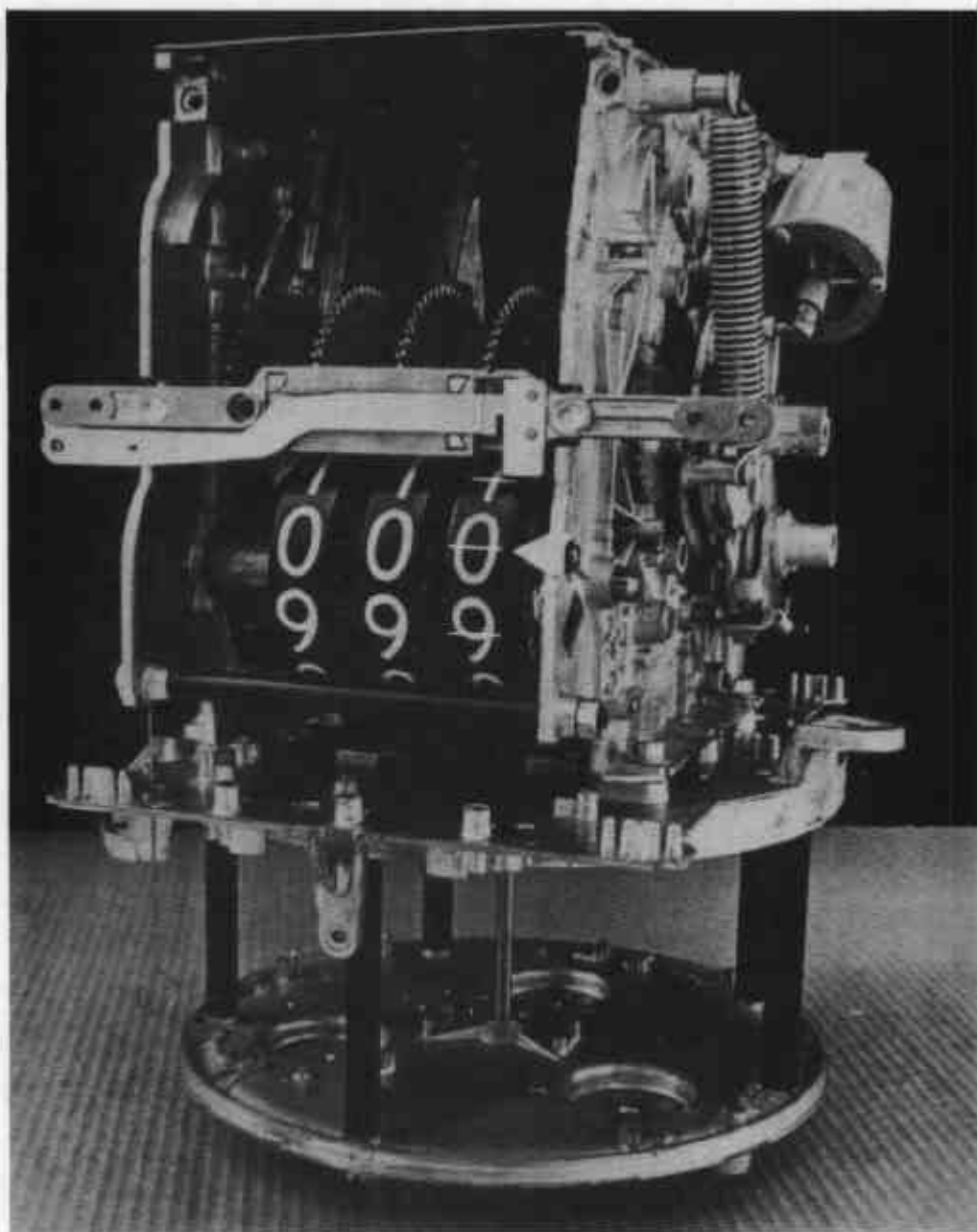


A

Veeder-Root Computer Model VR 101 -- Shield for Price-posting Wheels

20/6/74

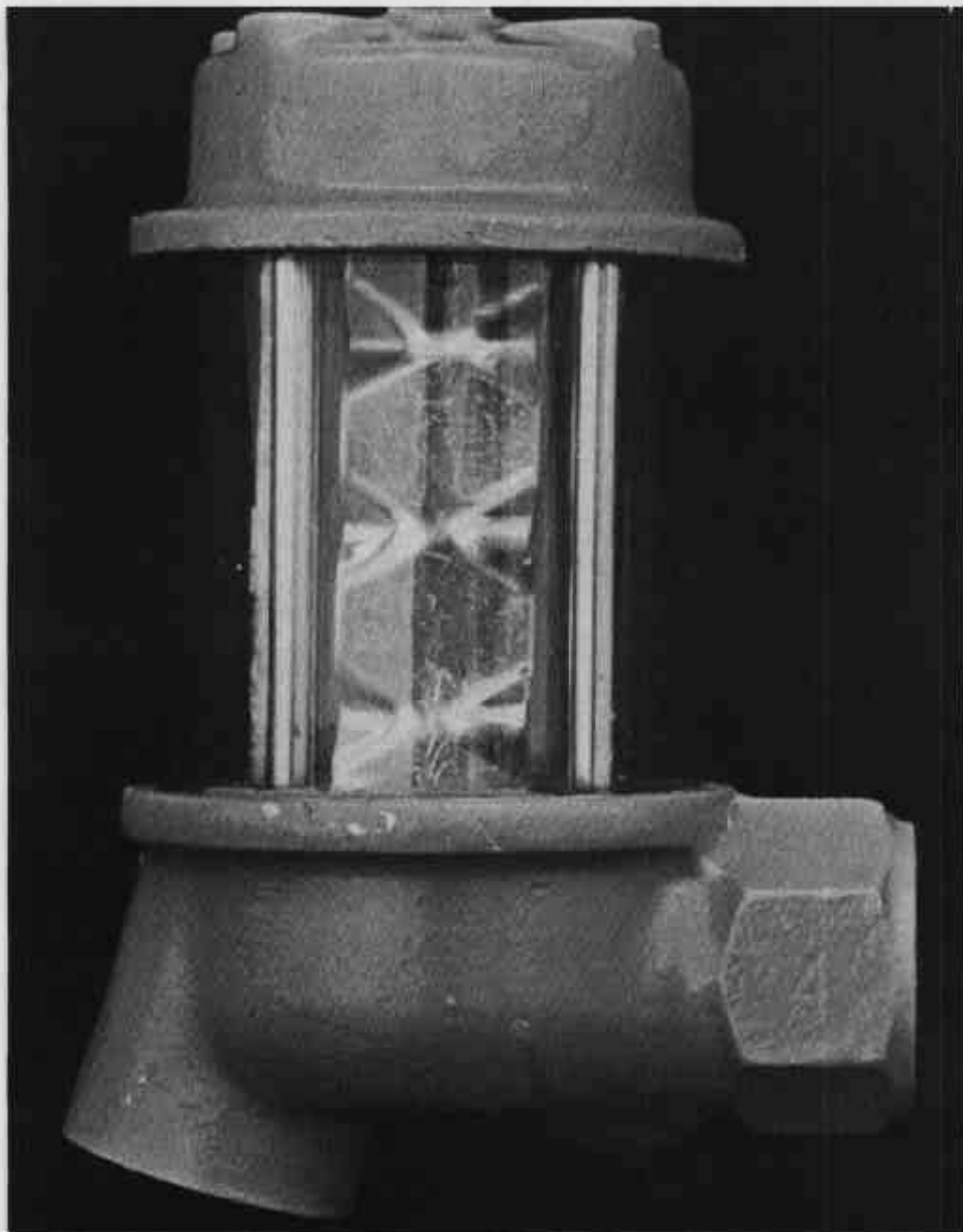
FIGURE 5/6A/48 - 43



Veeder-Root LQ 1615 Indicator

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FIGURE 5/6A/48 - 44



Wayne P3557 Sight Glass

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FIGURE 5/6A/48 - 45



Wayne P3959 Sight Glass

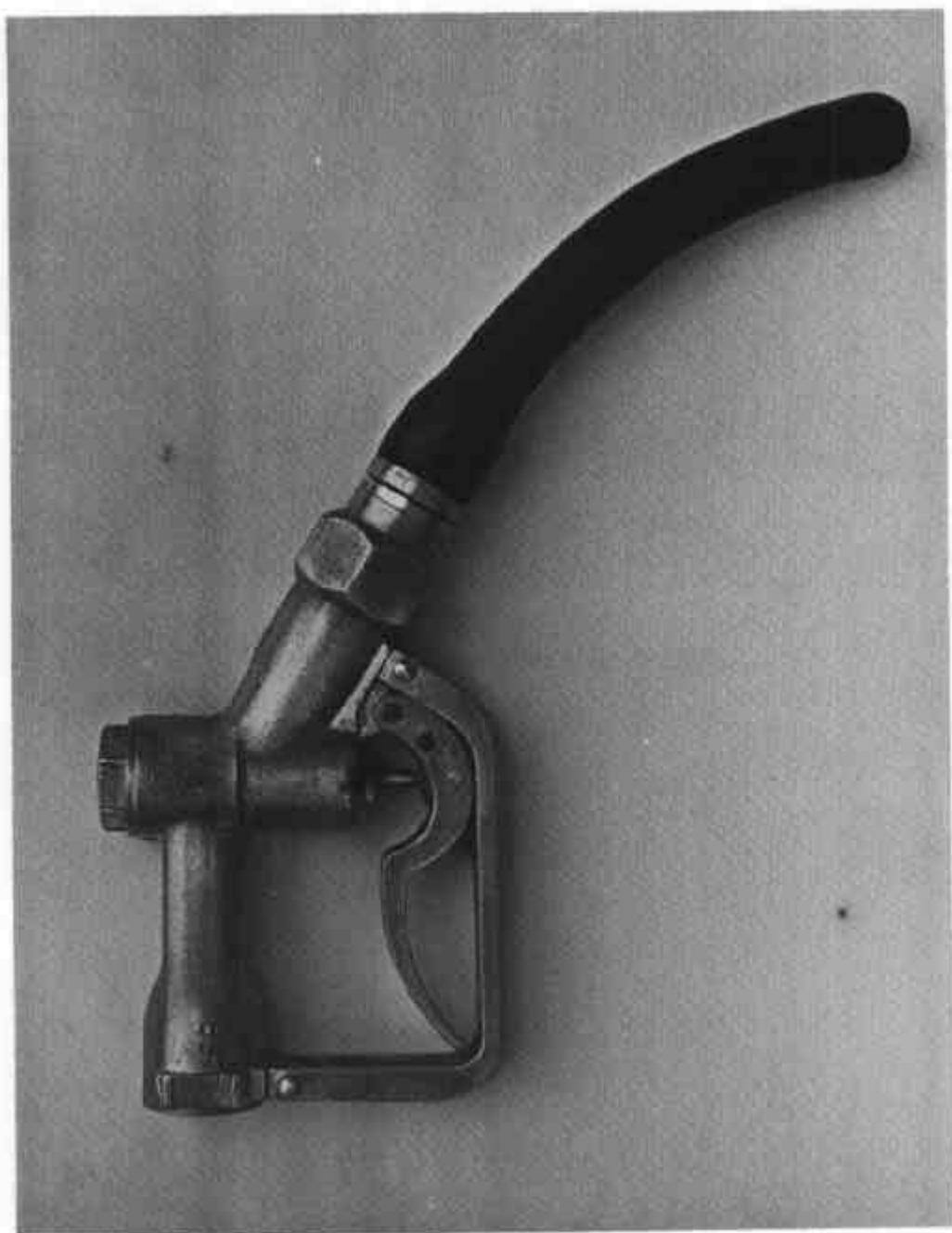
20/6/74



Wayne P4664 Sight Glass

20/6/74

FIGURE 5/6A/48 - 47



Wayne P4364 Nozzle

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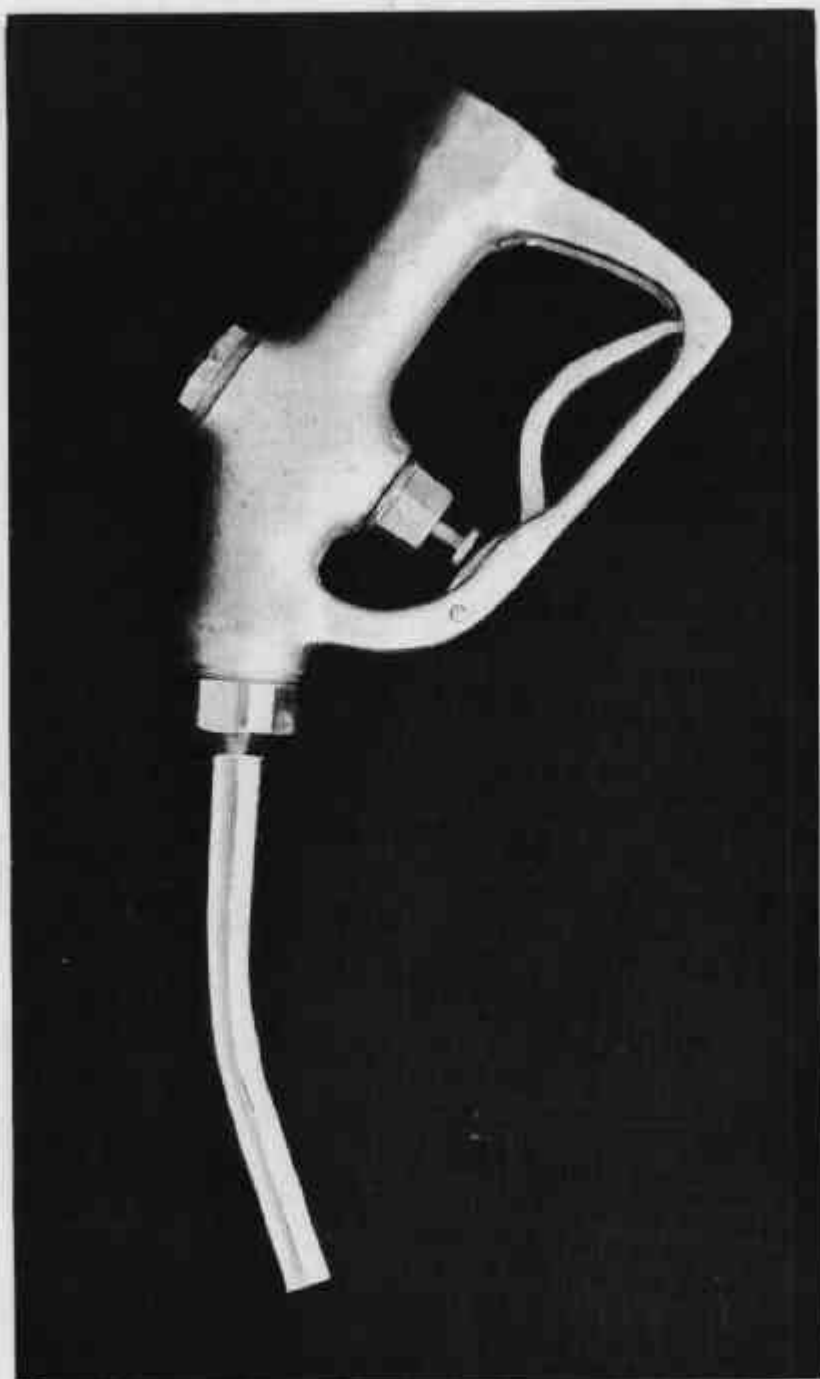
FIGURE 5/6A/48 - 48



Wayne P3484 Nozzle

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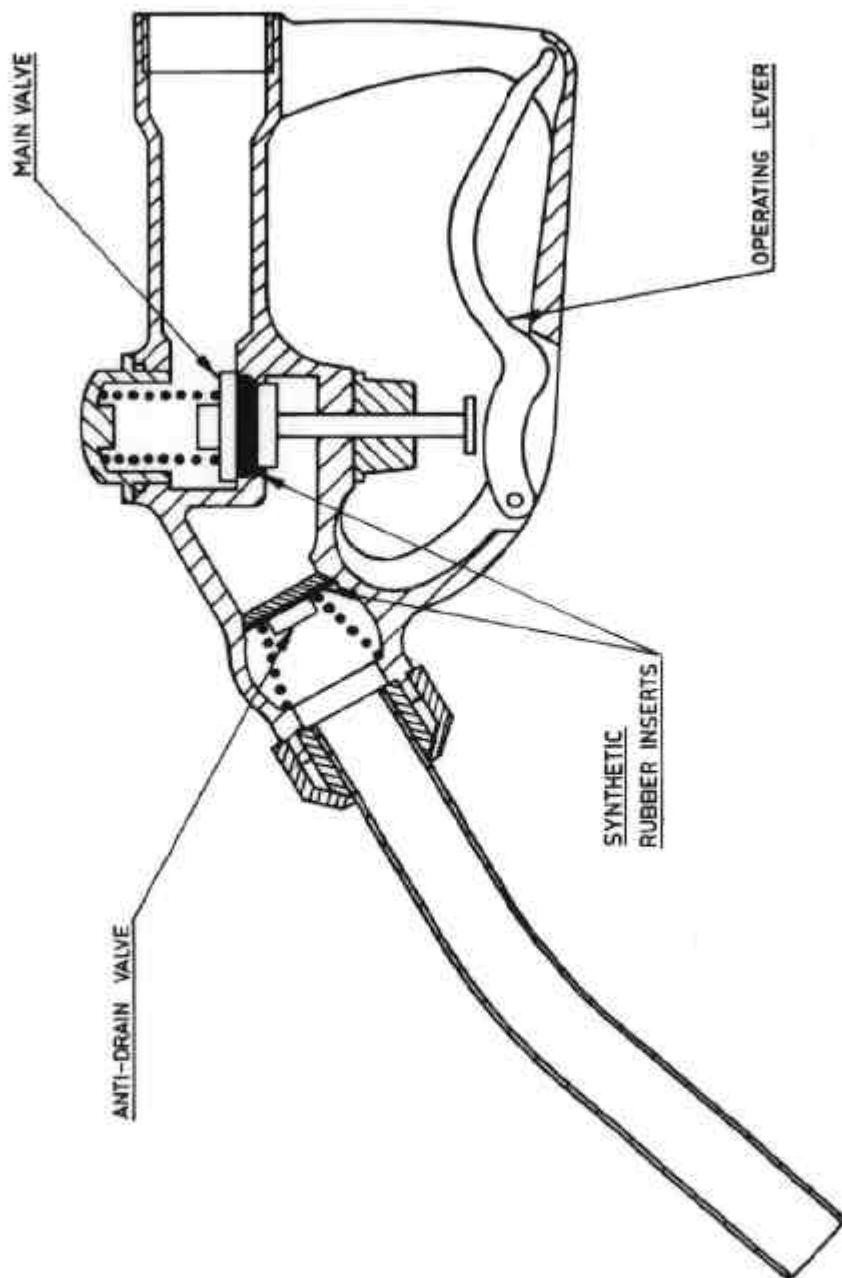
FIGURE 5/6A/48 - 49



Wayne P6561 Nozzle

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FIGURE 5/6A/48 - 50



Wayne P6561 Nozzle

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FIGURE 5/6A/48 - 51



Wayne P6959 Nozzle, with Rigid Spout

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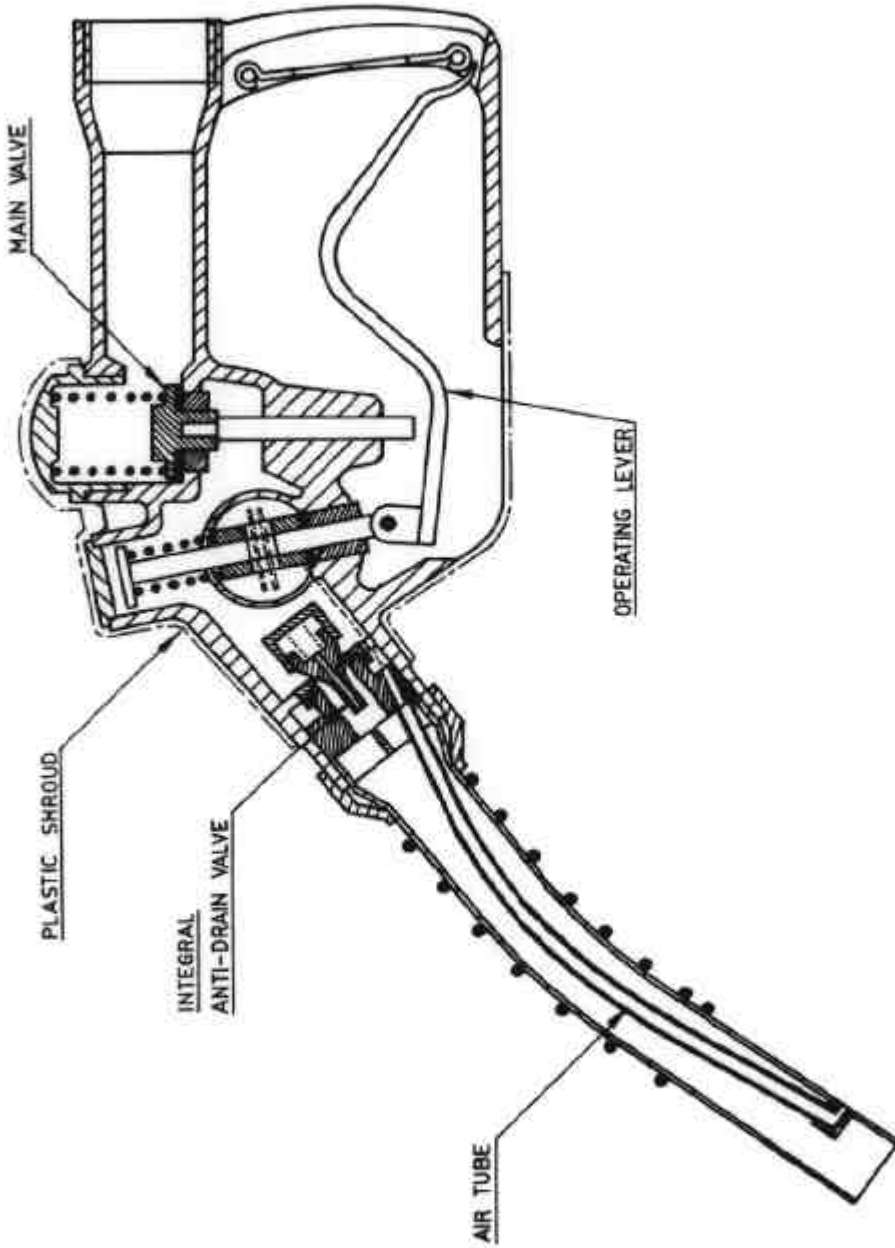
FIGURE 5/6A/48 - 52



Wayne P7775 Nozzle

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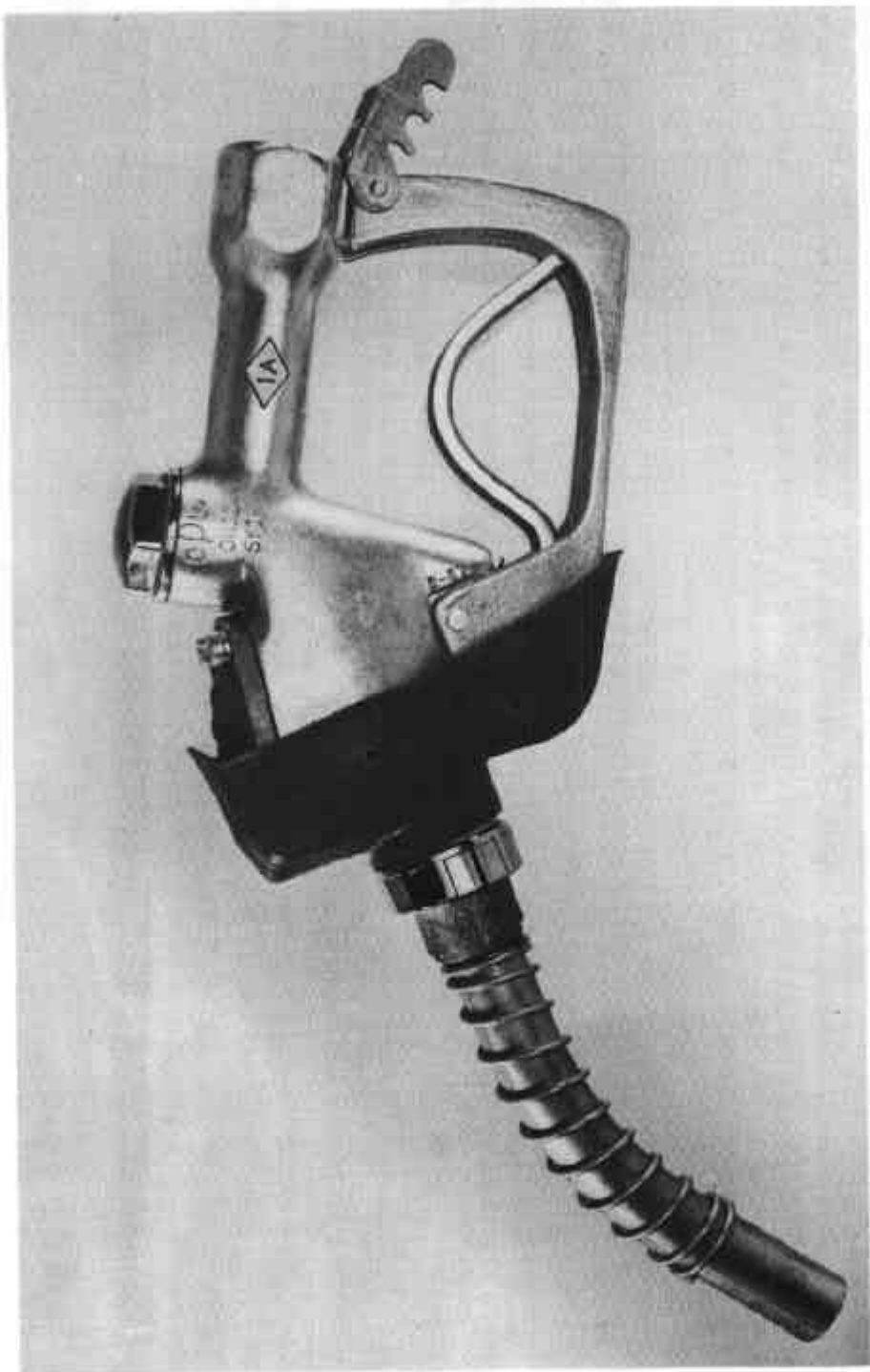
FIGURE 5/6A/48 - 53



Wayne P7775 Nozzle

20/6/74

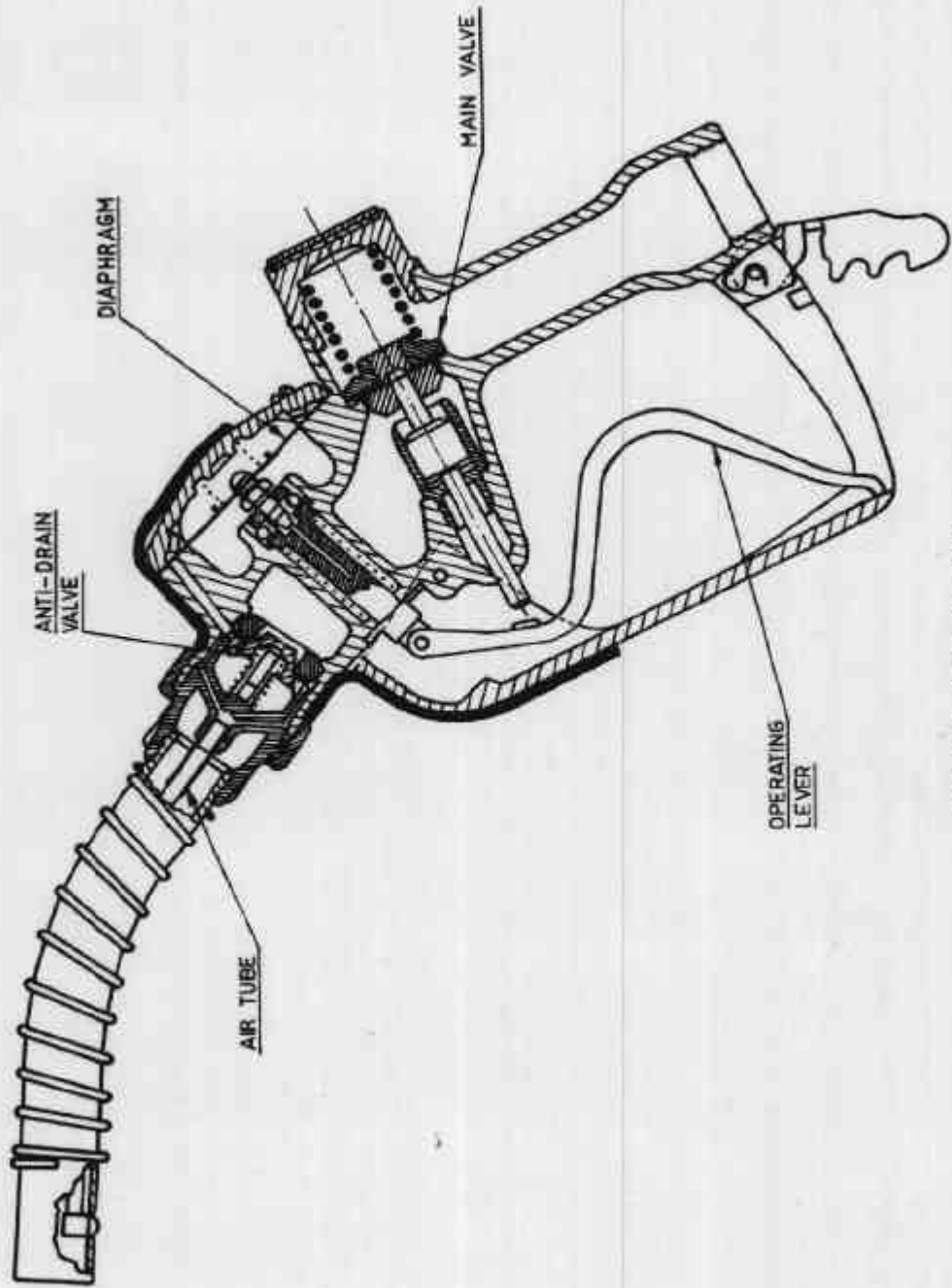
FIGURE 5/6A/48 - 54



OPW 1A Hose Nozzle

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FIGURE 5/6A/48 - 55



OPW 1A Hose Nozzle

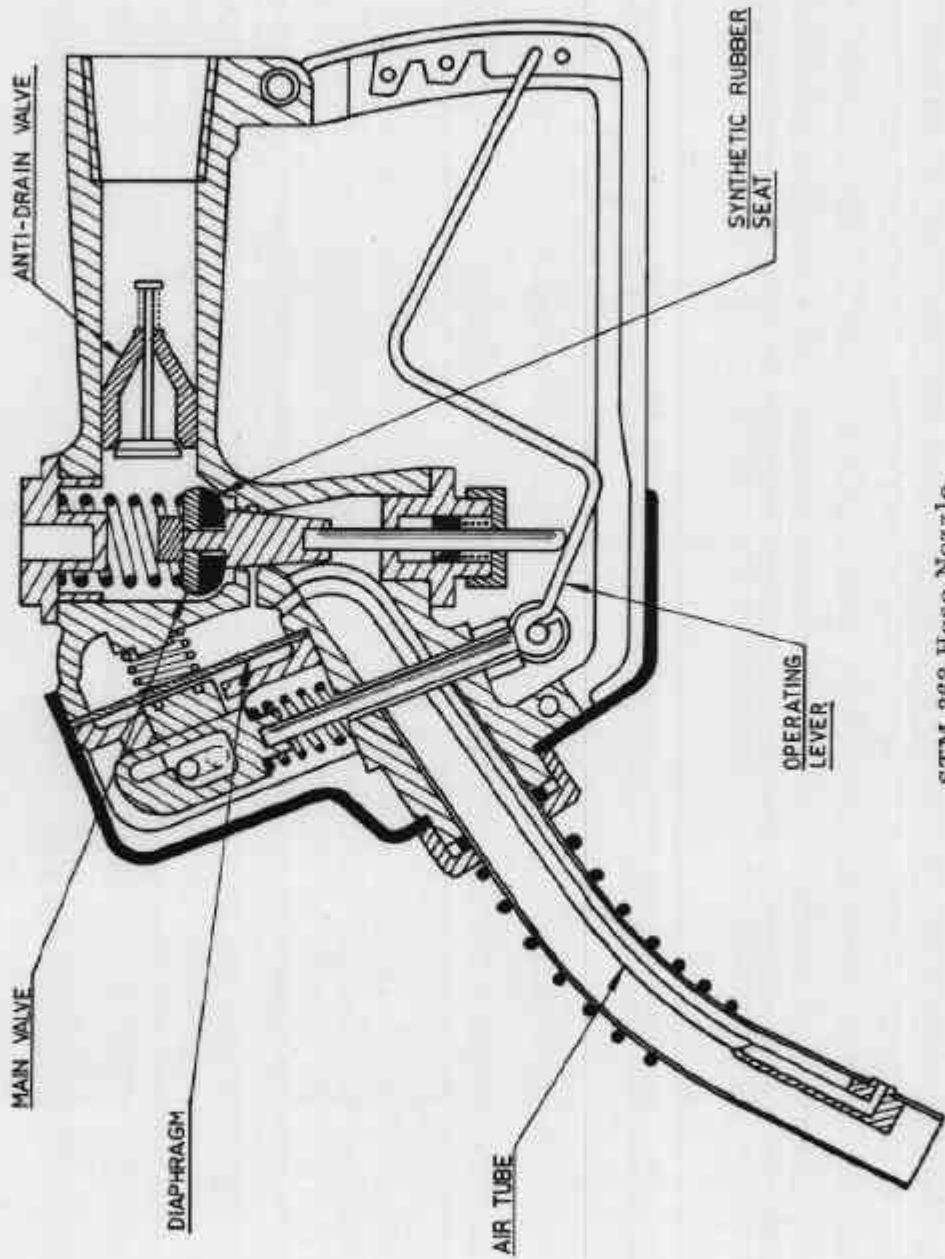
FIGURE 5/6A/48 - 56



STM 363 Hose Nozzle

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FIGURE 5/6A/48 - 57



STM 363 Hose Nozzle

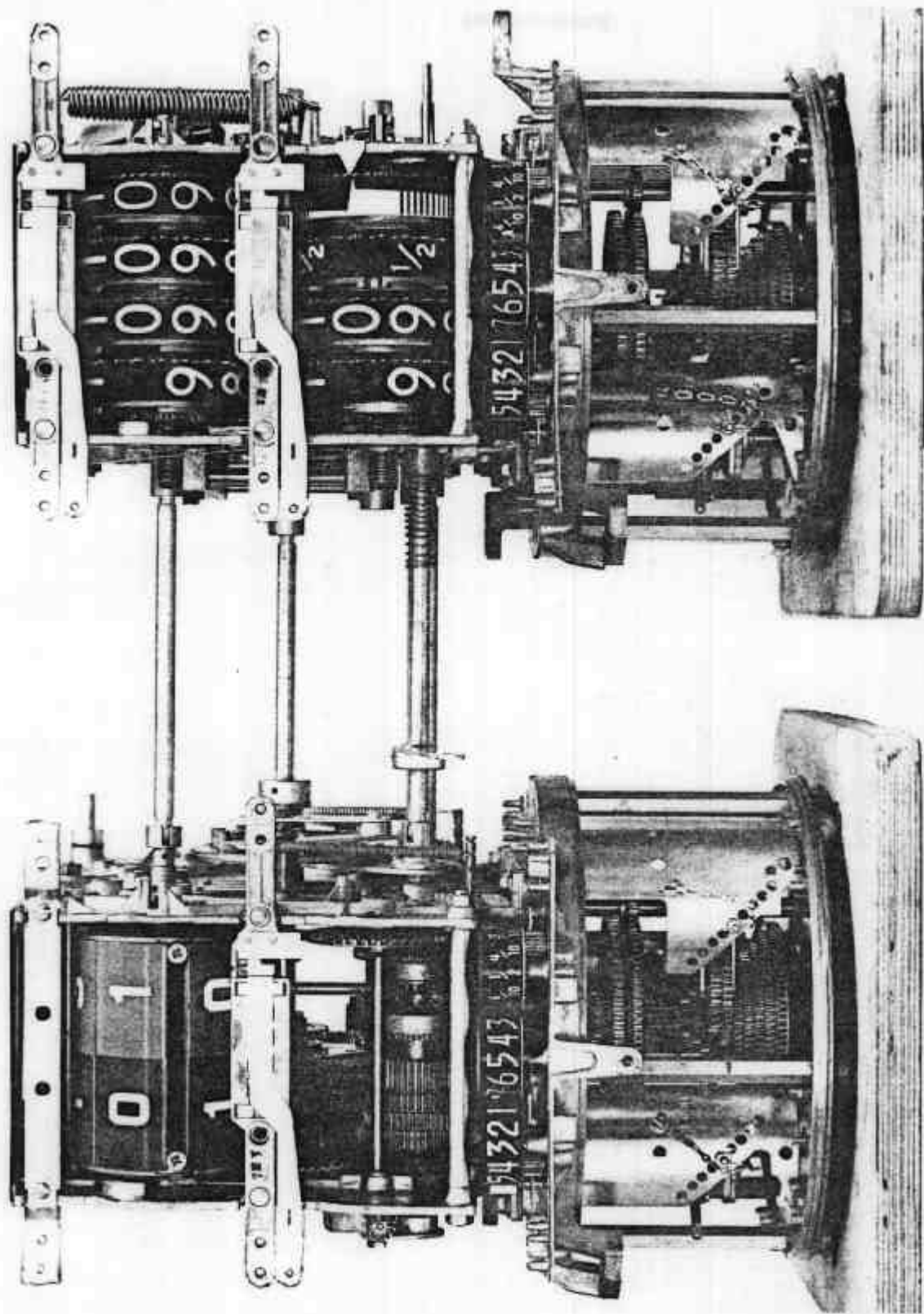
FIGURE 5/6A/48 - 58



Wayne 605 (Blending) Driveway Flowmeter

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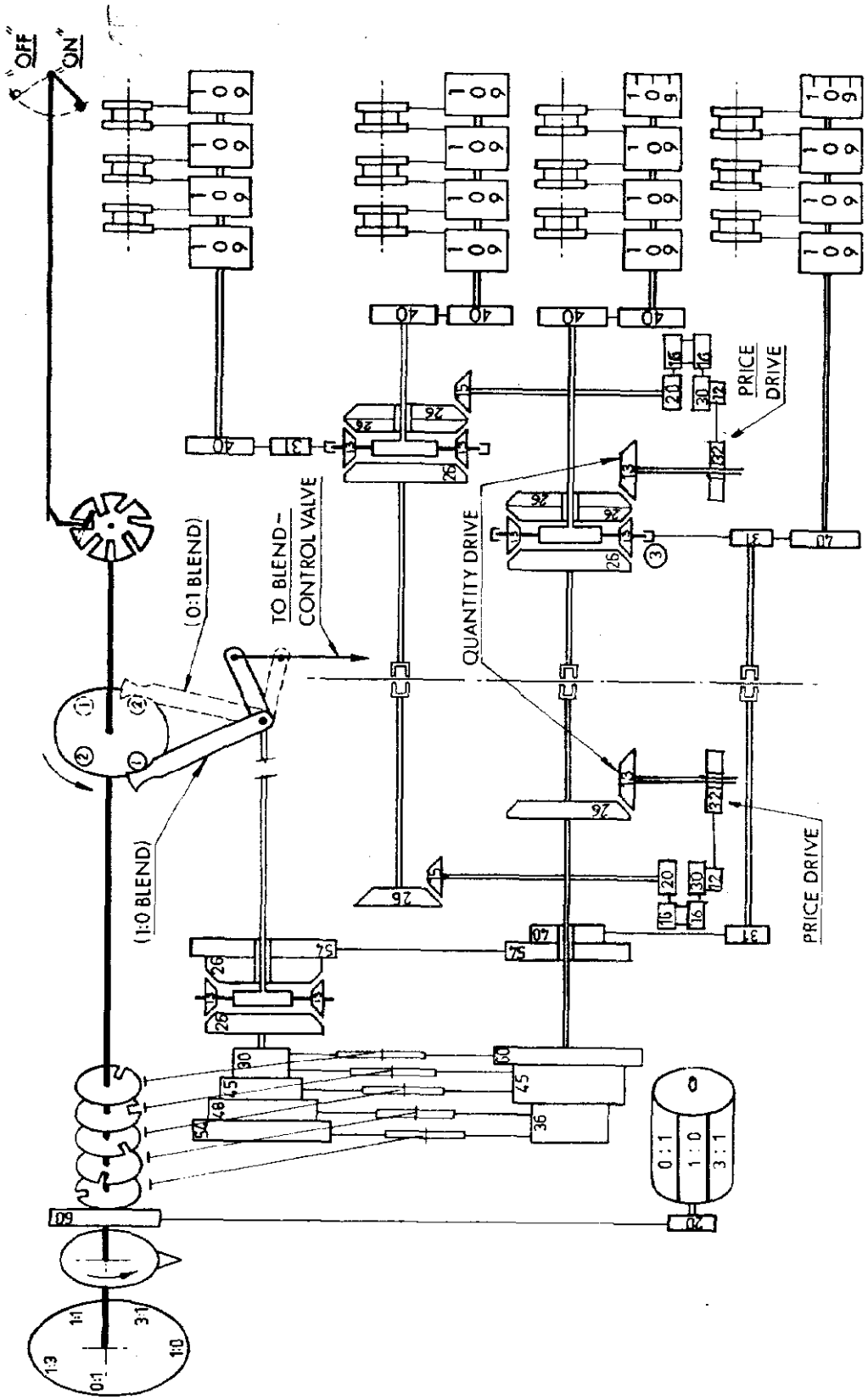
FIGURE 5/6A/48 -- 59



27/10/75

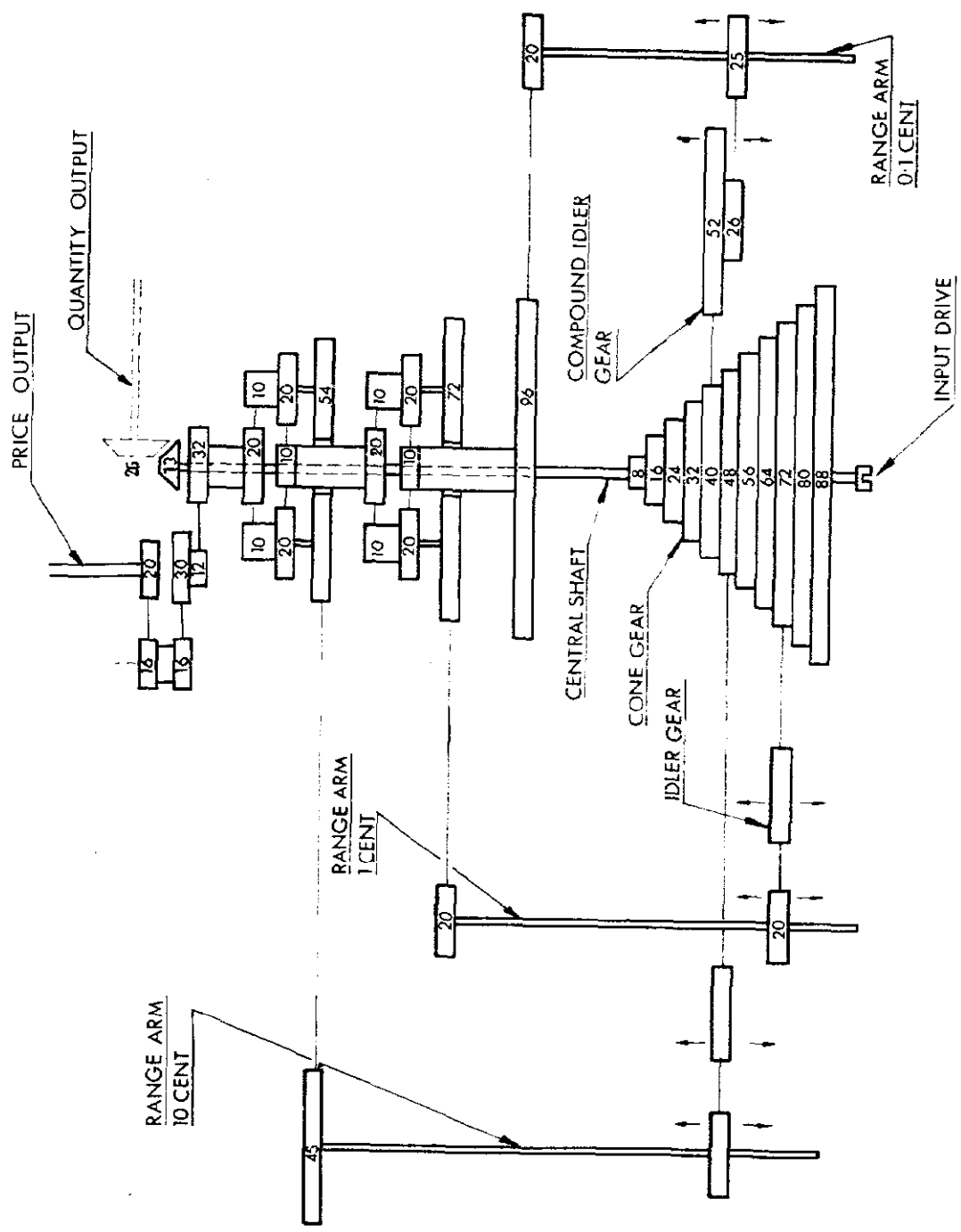
Veeder-Root Computer VR 1648

FIGURE 5/6A/48 - 60



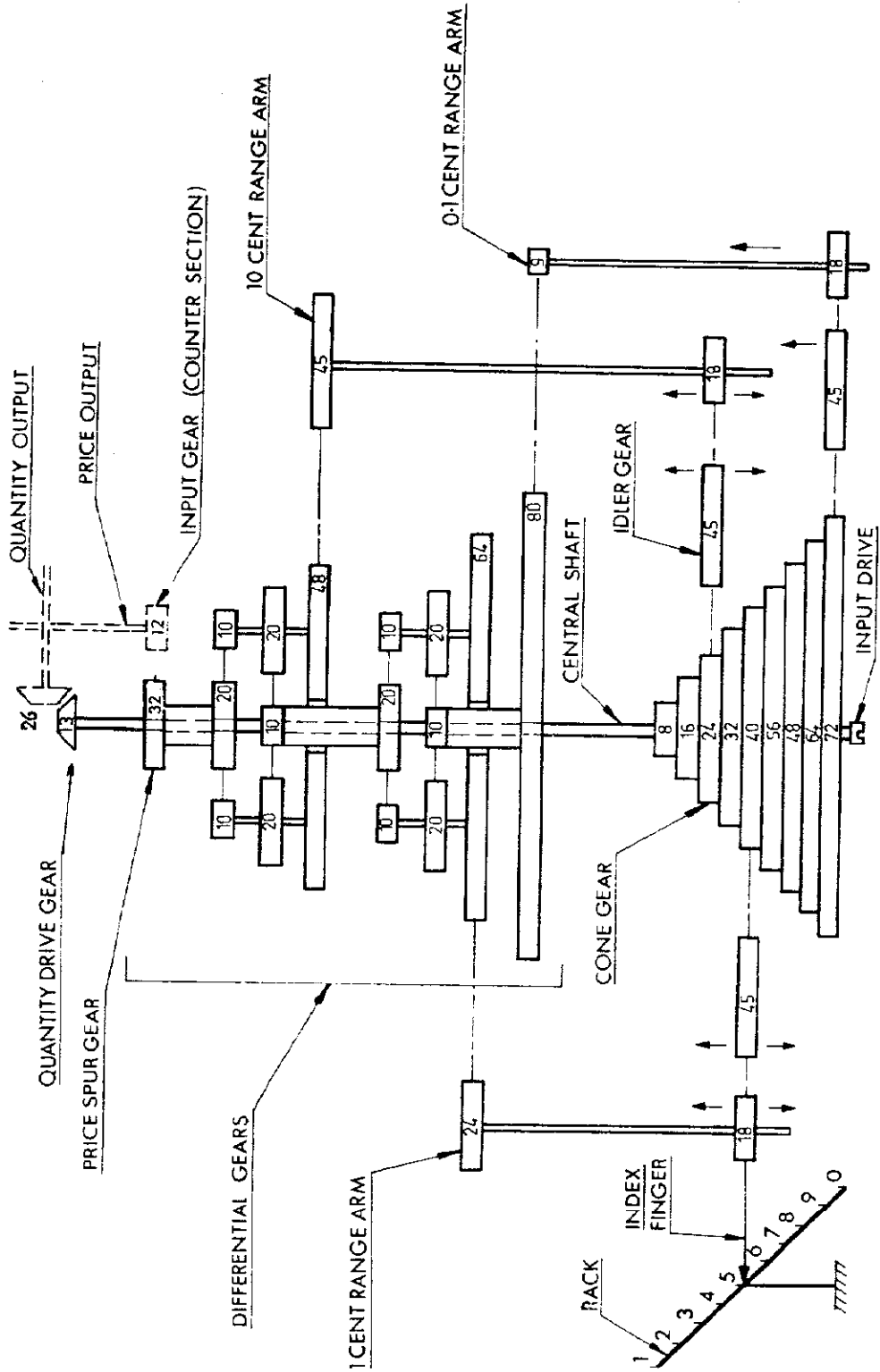
Weeder-Root Computer VR 1648 - Blend-control and Counter Sections
with Changes for Metric System of Measurement

FIGURE 5/6A/48 - 61



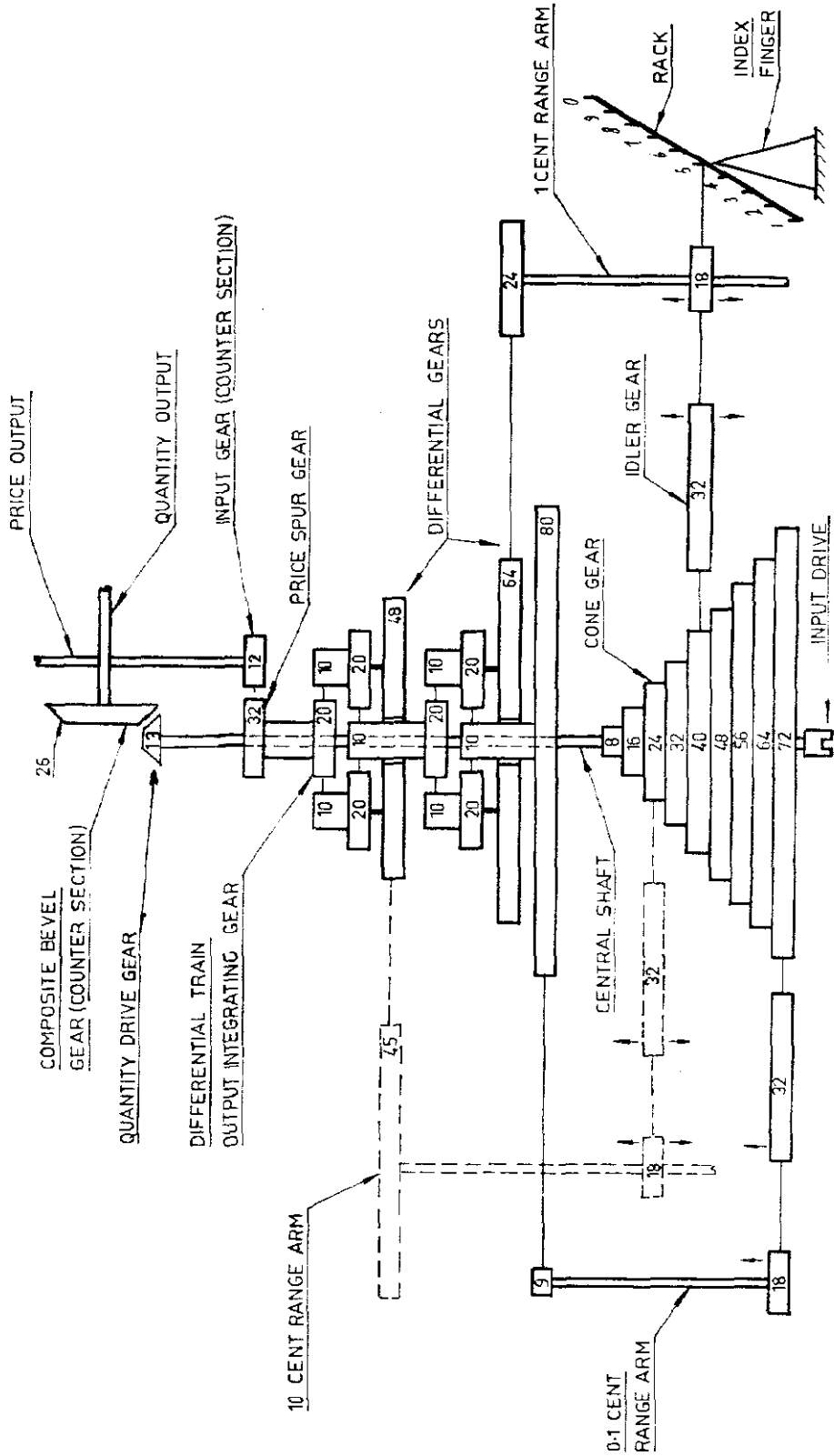
Veeder-Root 11/11½ Variator with Changes for Decimal Currency and Metric System of Measurement

FIGURE 5/6A/48 - 62

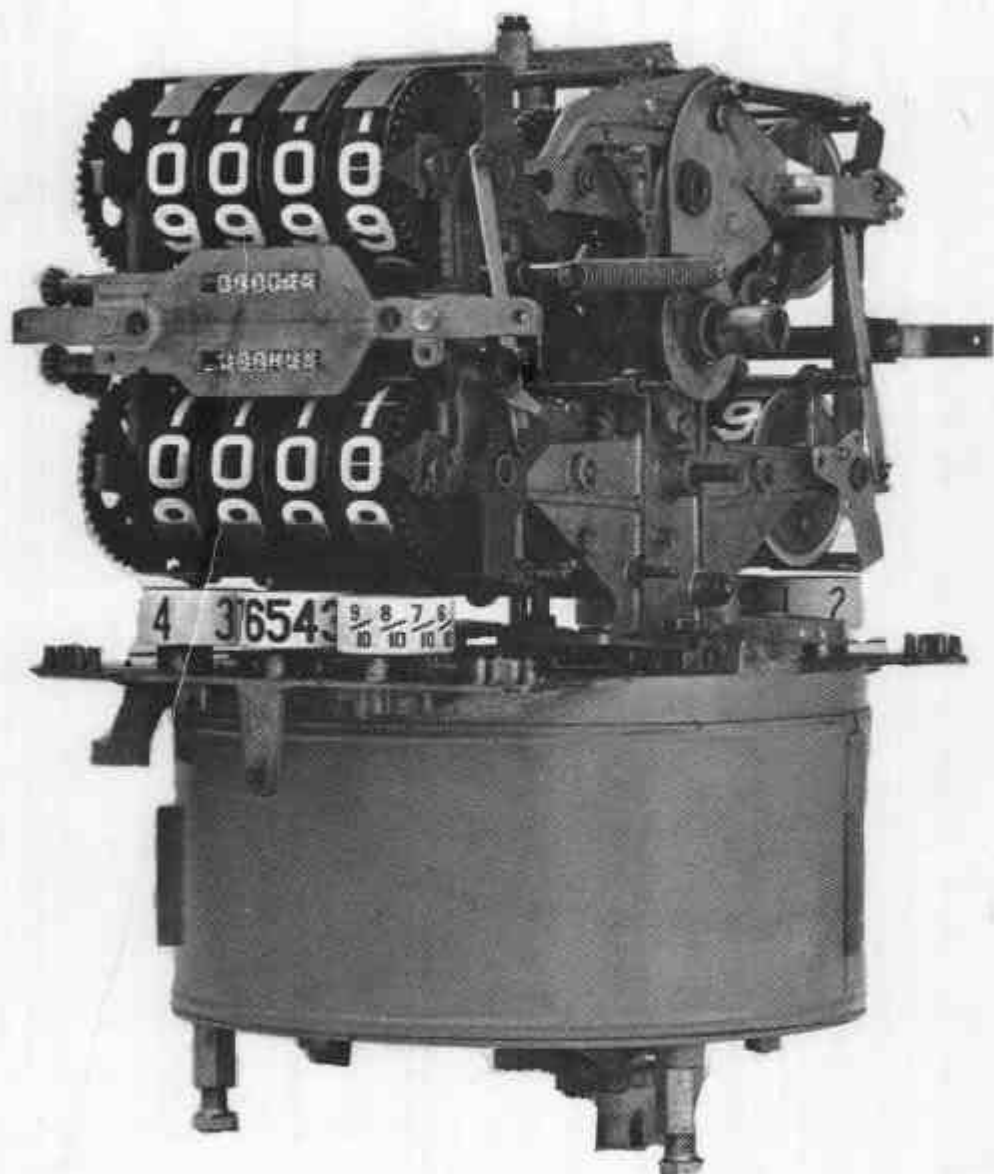


Veeder-Root 99, 9-cent Variator
with Changes for Metric System of Measurement

FIGURE 5/6A/48 - 63

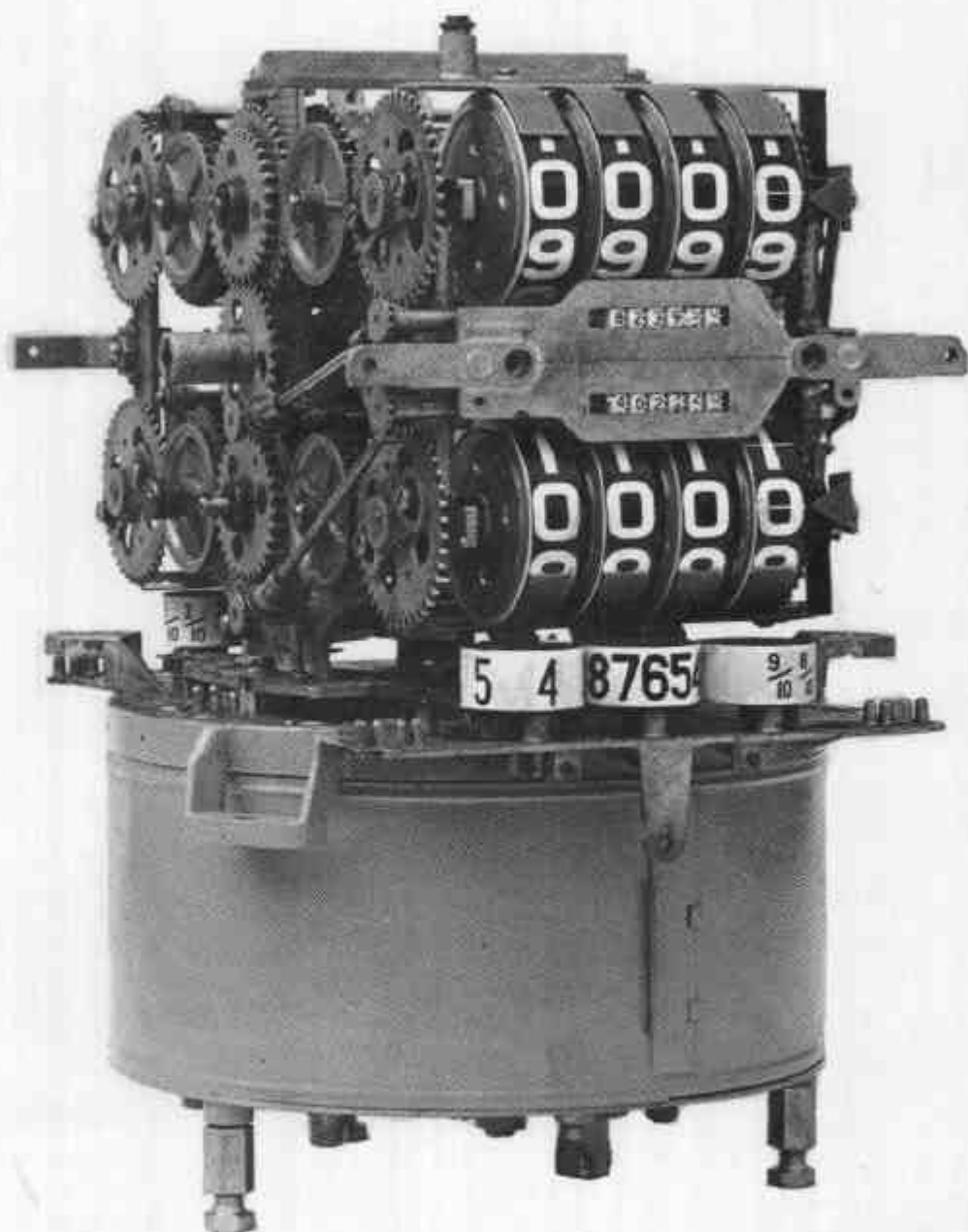


Veeder-Root VR 101 Variator
with Changes for Metric System of Measurement



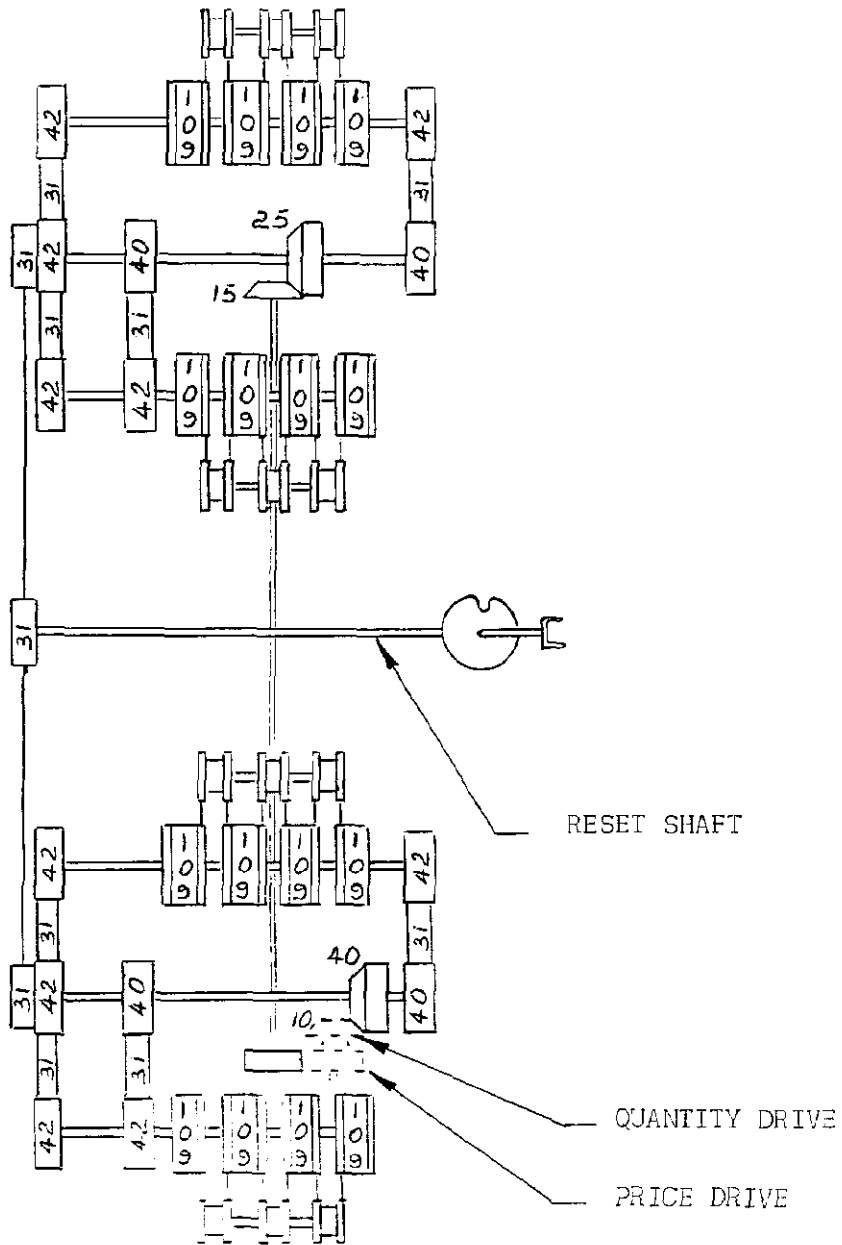
Veeder-Root M36 Computer with 4-wheel Counter-section
5/5/78

FIGURE 5/6A/48 - 65



Veeder-Root M36 Computer with 4-wheel Counter-section
5/5/78

FIGURE 5/6A/48 - 66



Veeder-Root M36 Computer 4-wheel Counter-section -
Schematic Diagram

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